

**Model 802
CENTER MOUNT
ADAPTER**
for New Holland 9030 & TV140
Bi-Directional Tractors

OPERATOR'S MANUAL

Inside Front Cover
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INTRODUCTION

This manual contains information on the Model 802 adapter which is required to allow attachment of MacDon Headers to the New Holland 9030 and TV140 Bi-Directional Tractors.

NOTE: This supplement does not provide all the information required to operate the header. It must be used in conjunction with your Harvest Header and Tractor Operator's Manuals.

CAREFULLY READ ALL MANUALS TO BECOME FAMILIAR WITH RECOMMENDED PROCEDURES BEFORE ATTEMPTING TO UNLOAD, ASSEMBLE OR USE THE MACHINE.

This manual is divided into sections on: "Safety", "Initial Set-Up", "Attaching and Detaching the Header", "Operation" and "Maintenance/Service".

Use the Table of Contents and the Index to guide you to specific areas. Study the Table of Contents to familiarize yourself with how the material is organized.

Keep this manual handy for frequent reference and to pass on to new operators or owners. Call your dealer if you need assistance, information or additional copies of the manual.

NOTE: Right hand (R/H), and Left hand (L/H) designations are determined from the operators position, facing the header.

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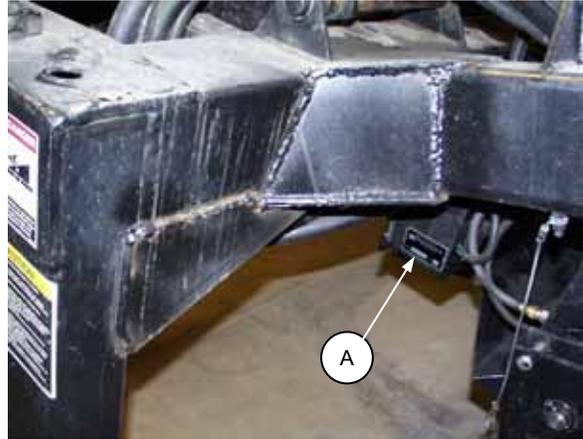
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SERIAL NUMBER LOCATION

Record the serial number in the space provided.

802 Adapter: _____

Plate (A) is located on flow control mounting plate.



802 ADAPTER SERIAL PLATE

NOTE: When ordering parts and service, be sure to give your dealer the complete and proper serial number.

SAFETY

SAFETY ALERT SYMBOL



This safety alert symbol indicates important safety messages in this manual and on safety signs on the machine.

This symbol means: ATTENTION !
 BECOME ALERT !
 YOUR SAFETY IS INVOLVED !

Carefully read and follow the safety message accompanying this symbol.

Why is SAFETY important to you?

3 BIG REASONS

- ACCIDENTS DISABLE AND KILL
 - ACCIDENTS COST
 - ACCIDENTS CAN BE AVOIDED
-

SIGNAL WORDS

Note the use of the signal words DANGER, WARNING, and CAUTION with safety messages. The appropriate signal word for each message has been selected using the following guidelines:



DANGER – Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.



WARNING – Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury. It is also used to alert against unsafe practices.



CAUTION – Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It is also used as a reminder of good safety practices.

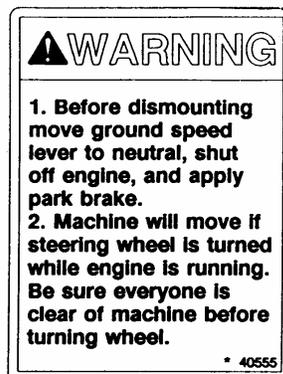
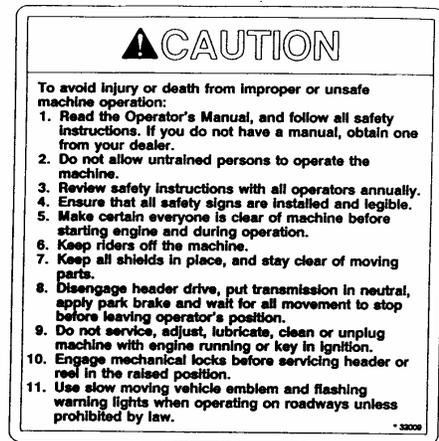
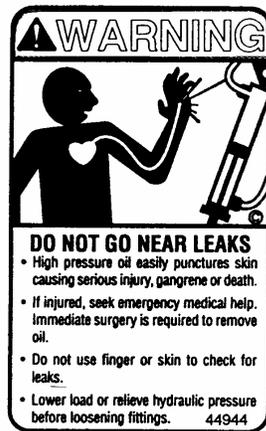
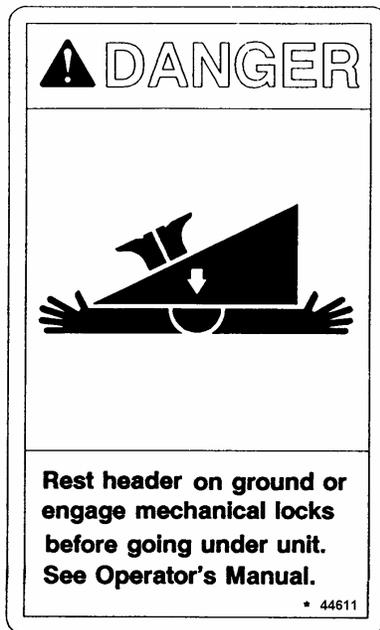
SAFETY

SAFETY SIGNS

- The safety signs below appear on the adapter.
- Keep safety signs clean and legible at all times.
- Replace safety signs that are missing or become illegible.
- If original parts on which a safety sign was installed are replaced, be sure the repair part also bears the current safety sign.
- Safety signs are available from your Dealer Parts Department.

To install safety signs:

1. Be sure the installation area is clean and dry.
2. Decide on the exact location before you remove the decal backing paper.
3. Remove the smaller portion of the split backing paper.
4. Place the sign in position and slowly peel back the remaining paper, smoothing the sign as it is applied.
5. Small air pockets can be smoothed out or pricked with a pin.



INITIAL SET-UP

PREPARING THE TRACTOR

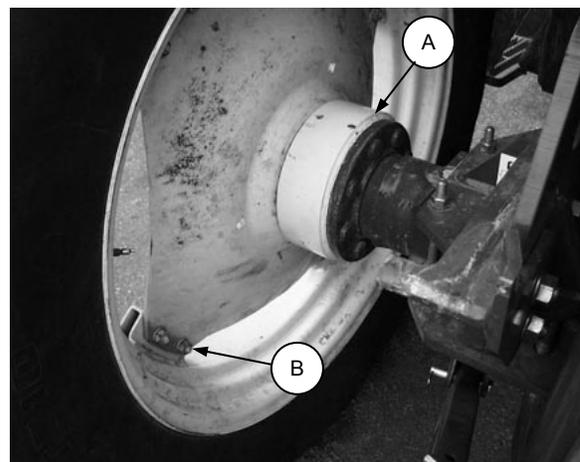
1. TRACTOR REQUIREMENTS AND SETTINGS:

- For 9030 tractor & TV140 tractor without auxiliary pump: 1000 rpm PTO at cab end to operate header drive pump.
- For TV140 tractor with auxiliary pump (Factory order NH #720827033)(Field order NH #86019713): One hydraulic circuit with 3/4" SAE female hydraulic quick couplers with 25 GPM flow and 4000 psi for header drive. If a flow meter is not available, see Header Controls, page 31 for alternate method.
- Seven terminal electrical receptacle (SAE J560b) with auxiliary switch in cab for warning lights and header control.
- Cab end 3-point hitch and drawbar **must be removed** to provide crop clearance and prevent damage to adapter.
- Two hydraulic circuits with 1/2" SAE female hydraulic quick couplers for header lift and reel lift, connected to GREEN and TAN hydraulic circuits. Set the flow from these circuits to minimum (8 GPM).
- One hydraulic circuit with 3/4" SAE female hydraulic quick couplers (TV140 Factory order NH #756171023)(TV140 Field order NH #86019715) with open return to tank. Provides 18 GPM flow for reel and conveyor drive, connected to BLUE hydraulic circuit. If a flow meter is not available, see Header Controls, page 31 for alternate method.
- One hydraulic circuit with 1/2" SAE male hydraulic quick coupler for case drain.
- Loader frame mount.
- TV140 Tractor:
 - 16.9 R38 R1 2-Star Tires
 - 12.4 R54 R1W 4-Star Tires optional
 - axle spacers to increase tread width to 88" (2235 mm) for hay conditioner shield clearance.
 - 2400 lbs (1090 kg) weight package for headers weighing over 3400 lbs (1542 kg)
- To avoid overloading tractor axle do not exceed header weights (including all attachments) listed in table below. Weights listed do not include adapter weight.

TRACTOR	Max. allowable header weight (Add 200 lbs. [90 kg] for 910, 920, 932 headers)			
	WITHOUT HAY CONDITIONER		WITH HAY CONDITIONER	
	Standard Position	Extended Position*	Standard Position	Extended Position*
9030	3610 lbs. (1638 kg)	3390 lbs. (1538 kg)	3000 lbs. (1360 kg)	2770 lbs. (1257 kg)
TV140	4330 lbs. (1964 kg)	4210 lbs. (1910 kg) 3610 lbs. (1638 kg)	3690 lbs. (1674 kg)	3560 lbs. (1615 kg) 2960 lbs. (1343 kg)
TV140 c/w weights	4760 lbs. (2160 kg)	4625 lbs. (2098 kg) 4025 lbs. (1826 kg)	4115 lbs. (1867 kg)	3980 lbs. (1805 kg) 3380 lbs. (1533 kg)

* This position is required when equipped with optional 12.4 R54 R1W 4-Star Tires. For tractors with these tires, use the lower of the two header weights listed.

2. **For TV140 Tractor:** For headers with hay conditioner, install wheel spacers (A) and attach wheels in outermost position (B) to achieve proper clearances for hay conditioner shield.



ADD SPACERS
TV140 WITH HAY CONDITIONER

INITIAL SET-UP

PREPARING THE TRACTOR (continued)

3. Install the header control panel in cab:

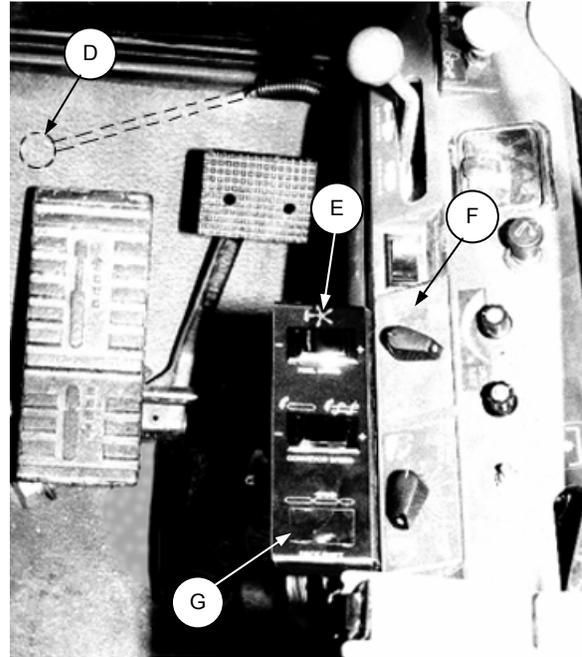
9030 TRACTOR

- Pull the floor mat back. Remove the "knock-out" plug from the 1 3/4" (45 mm) hole (D) in the floorboard. Hole is located 7" (180 mm) forward of floor bend-line, and 13" (330 mm) from the side of the console.
- Route the harness plug down through the hole. Pull the plug down between the hoses to the GREEN hydraulic couplers.
- Disassemble controller panel (E) from its mounting bracket and cover. Remove clamp from controller panel wiring harness and re-orient harness to point toward hole (D). Replace clamp. Position controller panel (E) even with the top of console. Align front of panel with edge of Rockshaft Position panel (F). Mark the mounting hole position and drill two 1/8" (3 mm) holes. Secure panel to console with two #10 x 1/2" self-tapping screws. Replace controller panel cover. (*Mounting bracket is used with TV140 tractor only.*)
- **IMPORTANT:** The auxiliary switch in cab must be on to operate header control panel. Consult your Tractor Operator's Manual for location of switch. If the tractor has no switch, ensure there is power to the center pin on the 7-pin connector when the key is ON.

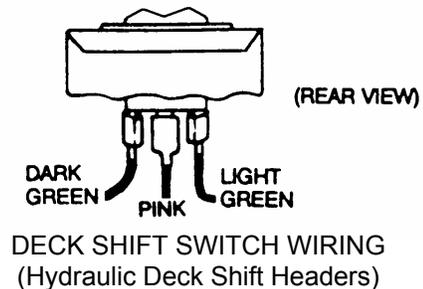
NOTE: For Hydraulic Deck Shift Header, install deck shift switch (shipped with the header) in control panel as follows:

NOTE: If header has a serial tag with production year '00 or older, switch provided with header will be too small for the hole in control panel. Order switch 109063.

- Cut decal to expose third switch hole (G) in panel.
- Push switch into hole and attach wires from harness as shown. (The other loose plugs in harness are not used in this application.)
- When header is attached, check function of deck shift switch. Pressing left side of rocker switch should shift decks to the left. If pressing left side of rocker shifts decks to the right and vice-versa, exchange positions of the two green wires at the switch.



INSTALL HEADER CONTROL PANEL (9030)



INITIAL SET-UP

PREPARING THE TRACTOR (continued)

3. Install the header control panel in cab:

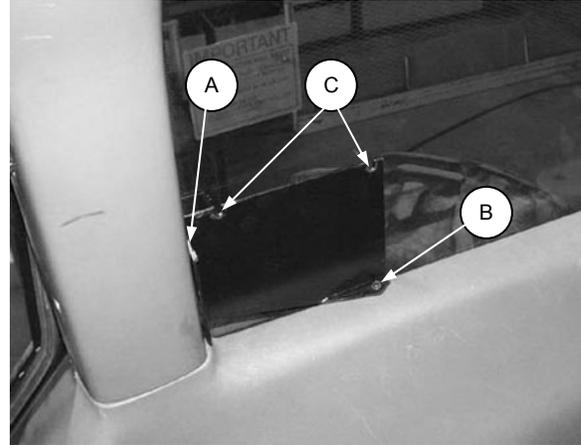
TV140 TRACTOR

- Attach panel mount to left post using existing hardware at (A). Drill a 1/8" (3 mm) hole and install a #10 x 1/2 self-tapping screw at (B).
- Hang control panel on mount by engaging screw heads in slots (C).
- Remove rubber grommet (D) near windshield and slit it on the side to allow inserting panel wiring harness.
- Position harness so plug is near electrical connector.
- **IMPORTANT:** The auxiliary switch in cab must be on to operate header control panel. Consult your Tractor Operator's Manual for location of switch. If the tractor has no switch, ensure there is power to the center pin on the 7-pin connector when the key is ON.

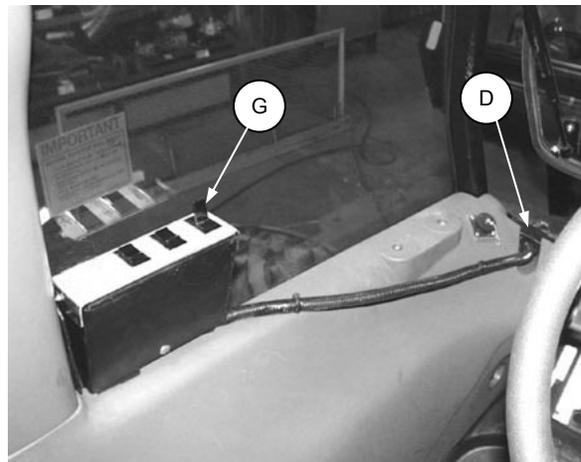
NOTE: For Hydraulic Deck Shift Header, install deck shift switch (shipped with the header) in control panel as follows:

NOTE: If header has a serial tag with production year '00 or older, switch provided with header will be too small for the hole in control panel. Order switch 109063.

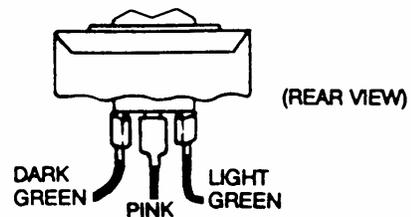
- Cut decal to expose third switch hole (G) in panel.
 - Push switch into hole and attach wires from harness as shown. (The other loose plugs in harness are not used in this application.)
 - When header is attached, check function of deck shift switch. Pressing left side of rocker switch should shift decks to the left. If pressing left side of rocker shifts decks to the right and vice-versa, exchange positions of the two green wires at the switch.
4. **9030 TRACTOR:** Install brackets (A), provided with the adapter, to reposition 9030 headlights inboard of their original position.
NOTE: These brackets are not required on the TV140 tractor.



INSTALL PANEL MOUNT



INSTALL HEADER CONTROL PANEL



DECK SHIFT SWITCH WIRING
(Hydraulic Deck Shift Headers)



INSTALL HEADLIGHT BRACKETS - 9030

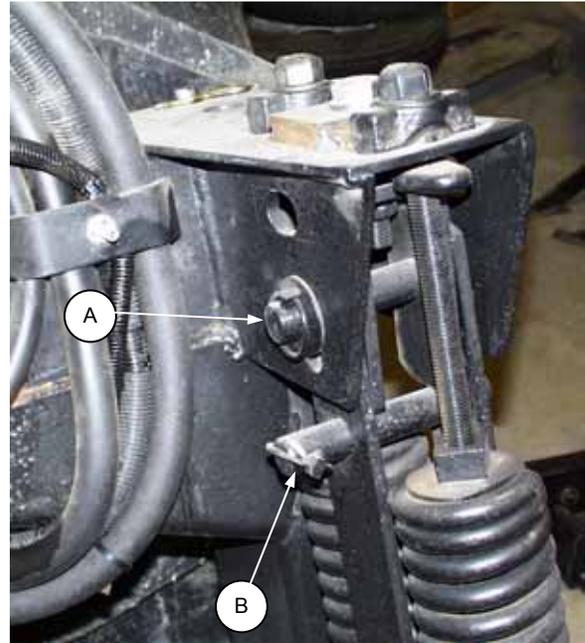
INITIAL SET-UP

PREPARING THE ADAPTER

1. Check that pin (A) is in working position and pin (B) in float lockout position as shown. Repeat at other side.

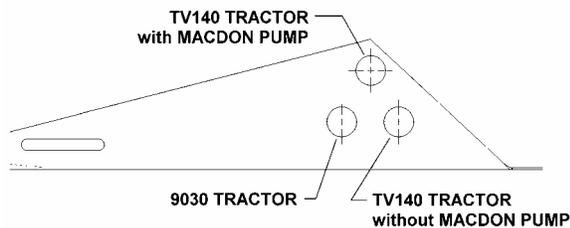
NOTE: At L/H side, pin (B) goes through round hole instead of slot. Loosen float springs to line up slot/hole for pin installation.

IMPORTANT: Damage to float may occur if pin (B) is not under frame on both sides.



INSTALL PINS - BOTH SIDES

2. Move crop deflector (C) to correct position for the application as shown below. For headers with hay conditioners, remove crop deflector (C). See following page for instructions.



CROP DEFLECTOR

NOTE: Adapters can be ordered in two configurations:

- A. For 9030 Tractor or TV140 Tractor without Auxiliary Pump. This configuration includes a MacDon supplied header drive pump that runs off the tractor PTO.
- B. For TV140 Tractor with Auxiliary Pump (NH #720827033). This configuration uses the auxiliary pump for header drive.

If it is necessary to convert from configuration B to A, order **B2837**. Conversion instructions are included with this kit.

INITIAL SET-UP

PREPARING THE ADAPTER (continued)

ADJUSTING OR REMOVING THE CROP DEFLECTOR:

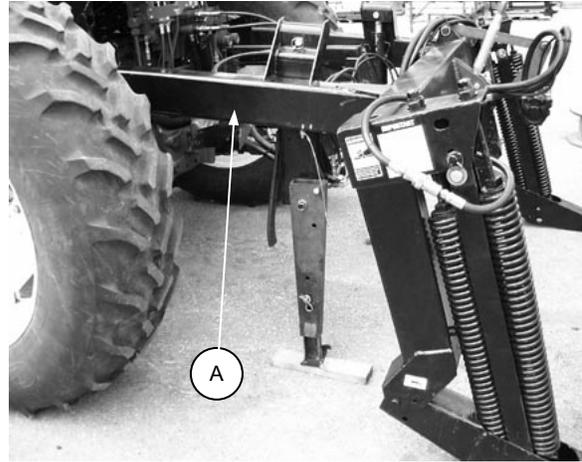
Tractor Attached To Adapter:

1. If the tractor is attached to the adapter, partially detach adapter from tractor by following steps 3 through 7 on page 20 of this manual.
2. Proceed with steps 3 through 7 given below.

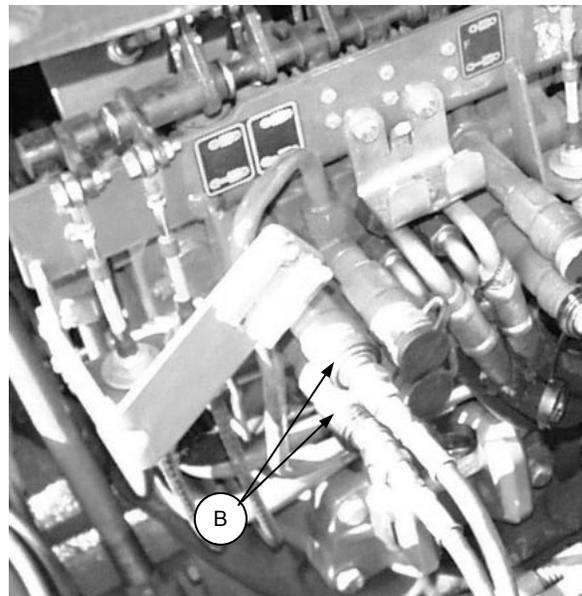
Tractor Not Attached To Adapter:

To adjust or remove crop deflector:

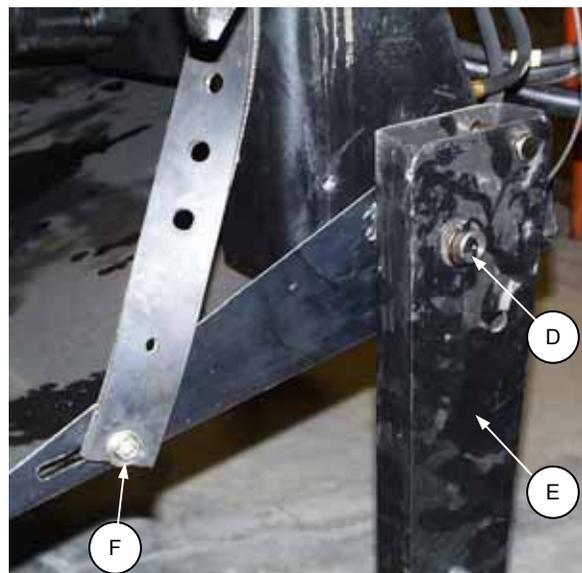
1. Drive the tractor slowly towards the adapter until the 4x4 tubes (A) contact the loader frame rails on the tractor. Stop engine and engage parking brake on tractor.
2. Attach the header lift hoses (B) to the GREEN couplers on the tractor.
NOTE: For TV140 tractor, ensure that "header raise" hose is installed in the EXTEND port.
3. Raise and lower cylinder as required to drive tractor so 4x4 tubes are 4" (100 mm) onto tractor frame rails. Engage parking brake on tractor.
4. Raise and lower cylinders until pins (D) are loose then remove stands (E).
5. Slide pins (D) back so crop deflector can be moved to new position or removed.
6. Remove bolts (F) if crop deflector is being removed.
7. Reassemble stands (E).



POSITION TRACTOR FOR HOOK-UP



ATTACH LIFT HOSES



ADJUSTING/REMOVING CROP DEFLECTOR

INITIAL SET-UP

PREPARING THE HEADER

Tractor is positioned at header center delivery opening. A center delivered windrow goes under the tractor. Windrow width and height are limited by tractor tire tread width and tractor frame height.

Headers with hay conditioner: Cab end tire tread width must be 88" (2235 mm) center to center to clear hay conditioner shield.

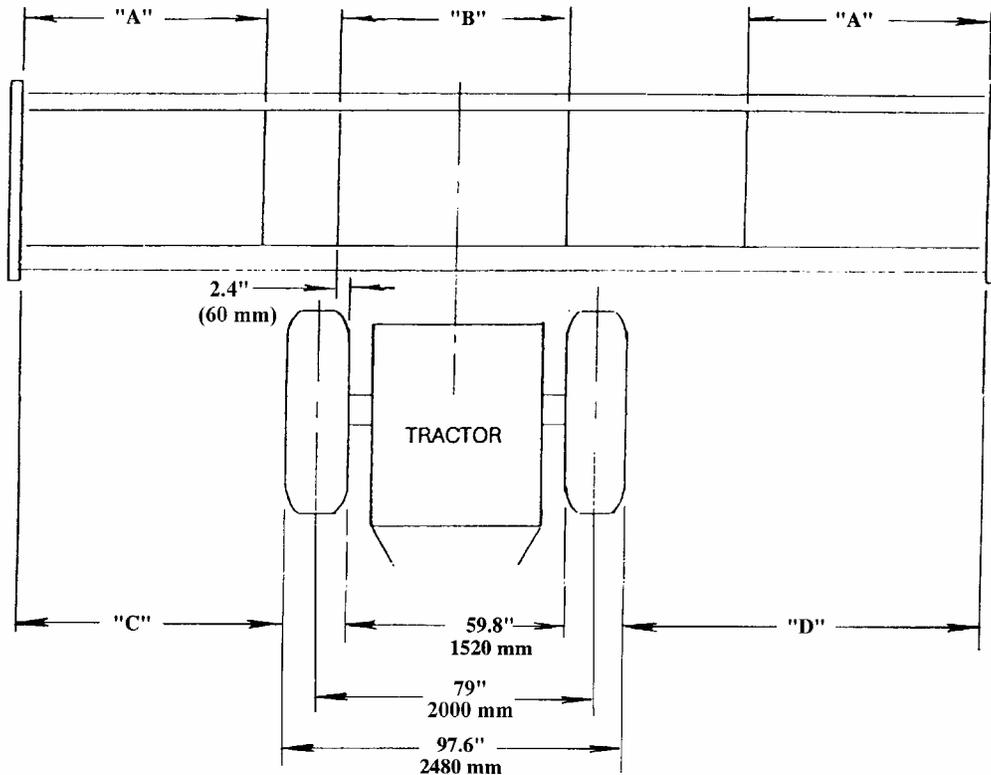
Headers with Reel Lift: Extend reel lift hose by removing existing coupler and replacing it with hose and coupler supplied with adapter.

970 Series Headers: For 21' to 36' headers, the sickle drive assembly at left end sheet and drive shaft along left side of back tube must be in "Windrower" configuration (in upper of two positions). If conversion from "Combine" configuration is necessary, order the following conversion kit:

21' – B2620, 25' – B2621, 30' – B2622, 36' – B2623. Instructions are provided with the kit.

The illustration below shows the maximum delivery opening width (distance between rollers) and clearances with tractor tire tread width set at 79 inches (2000mm). This is the minimum tread width recommended for the 802 Adapter. Tractor tire to windrow clearance can be increased by changing the tread width. Keep in mind that crop may fan out as it leaves the header. Allow enough clearance to prevent tires running over the windrow.

NOTE: Delivering bushy crops like canola under the tractor may cause poor windrow formation due to restricted under-tractor clearance.



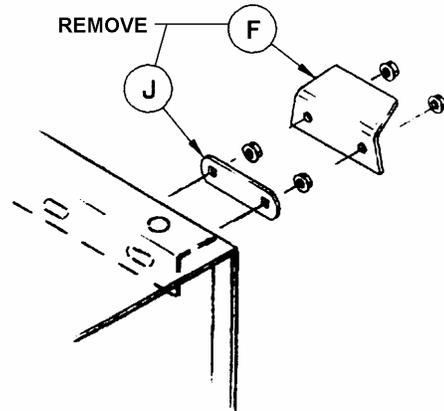
HEADER SIZE	MAXIMUM OPENING SIZE		DIM. "C"	DIM. "D"
	DIM. "A"	DIM. "B"		
21'	53.0" (1345 mm)	65.4" (1660 mm)	74.5" (1892 mm)	74.5" (1892 mm)
25'	64.3" (1633 mm)	65.4" (1660 mm)	98.5" (2502 mm)	98.5" (2502 mm)
30'	64.3" (1633 mm)	65.4" (1660 mm)	128.5" (3264 mm)	128.5" (3264 mm)
36'	64.3" (1633 mm)	65.4" (1660 mm)	152.7" (3879 mm)	176.3" (4478 mm)

INITIAL SET-UP

PREPARING THE 721/722 HAY CONDITIONER

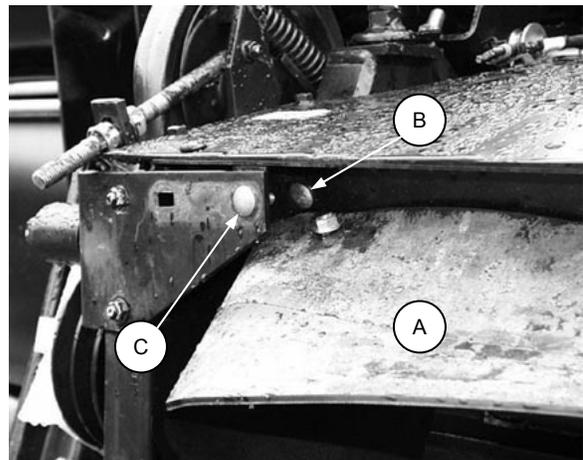
This conditioner is used with 910 Series and 920/922 Auger Headers. For Model 942 and 970 Series Headers, see page 15.

1. Remove two flange nuts, front hinge support (F), two more flange nuts and bar (J) from rear of conditioner top cover, both sides.



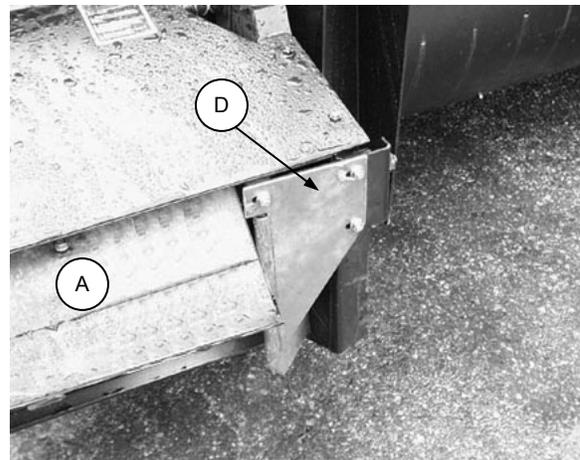
DISASSEMBLE FRONT HINGE SUPPORTS

2. Install rubber shield (A) by attaching its mounting angle with 3/8 x 3/4 bolts (B) supplied with completion package
3. Install 3/8 x 1" bolt (C), supplied with adapter completion package, with head to outside on left end of conditioner frame.



INSTALL RUBBER SHIELD
INSTALL SHORTER BOLT – L/H END

4. Assemble deflector (D) to right end of conditioner frame with 3/8 x 1" bolts supplied with adapter completion package.

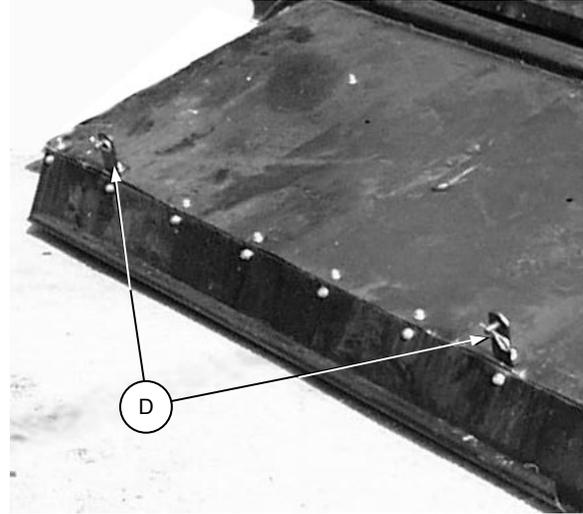


INSTALL DEFLECTOR – R/H END

INITIAL SET-UP

PREPARING THE 721/722 HAY CONDITIONER (continued)

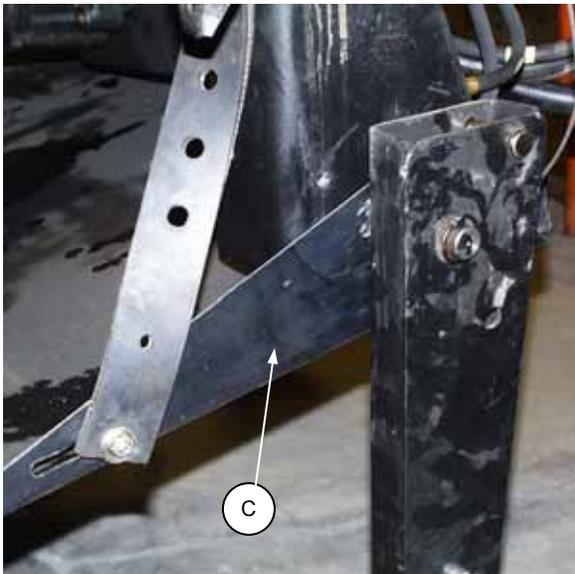
5. Move rear forming shield support brackets (D) to second bolt from each end.



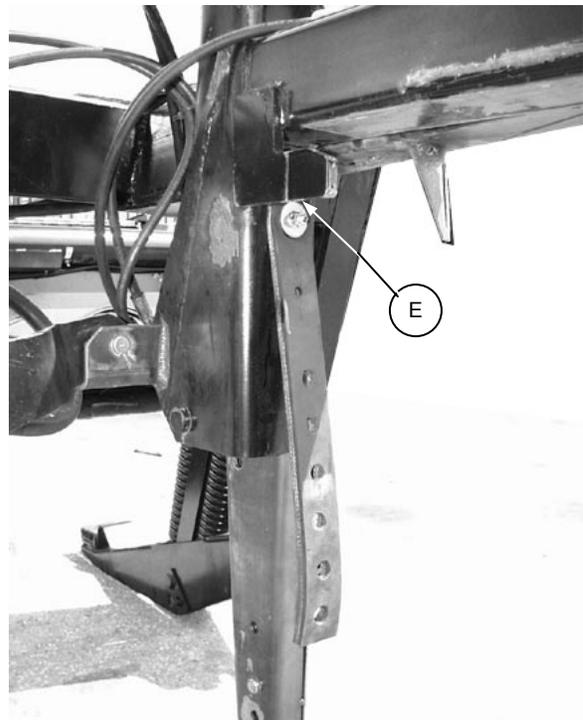
ATTACH REAR SUPPORTS

6. Remove crop deflector (C) from under adapter to allow conditioner forming shield installation. See page 10 for removal instructions.

Remove L-bracket from top of rubber strap and attach rubber strap (E) to adapter frame with 3/8 flange nut and washer supplied with hay conditioner shield. Attach strap to bracket (D) at longest adjustment to ensure adequate clearance to pump at first hook-up. Readjust to height desired after hook-up.



REMOVE CROP DEFLECTOR

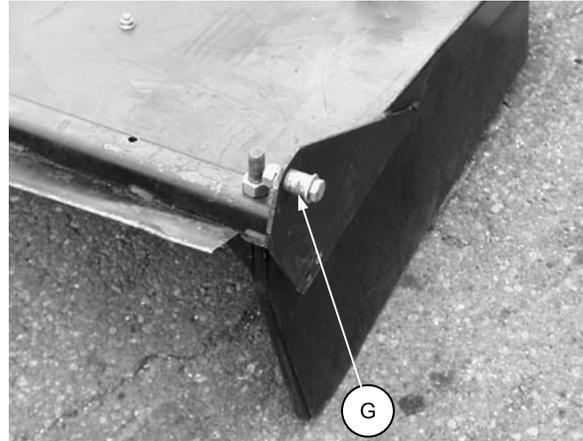


ATTACH RUBBER STRAPS

INITIAL SET-UP

PREPARING THE 721/722 HAY CONDITIONER (continued)

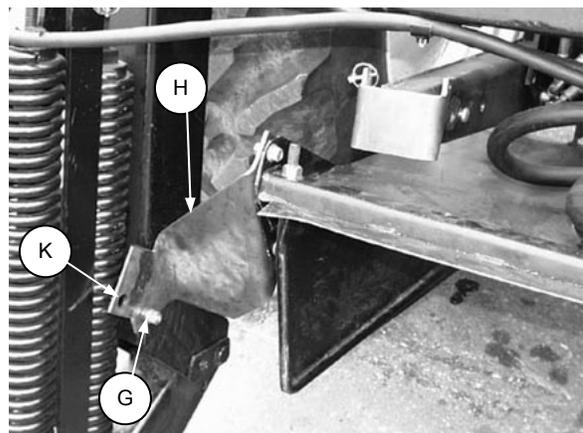
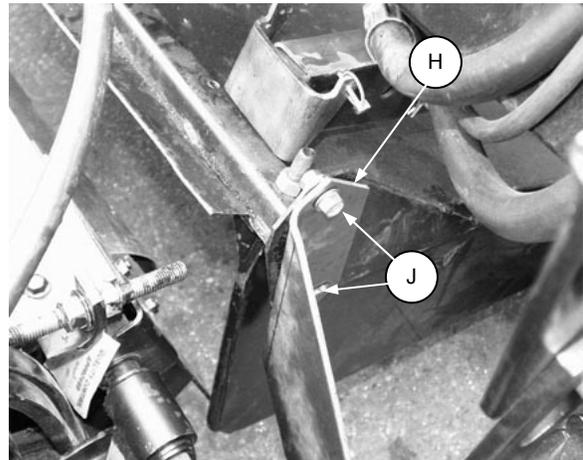
7. Remove spacers (G) from shield and install in brackets on adapter frame legs at location shown in Step 8 below. Ensure that bolt head and spacer are positioned on inboard side of frame bracket and lockwasher and nut are positioned outboard.



REMOVE SPACERS

8. Install front supports (H) supplied with completion package onto spacers installed in Step 7. Bolt to forming shield with $\frac{1}{2}$ x 1 flange bolts and flange nuts at (J) as shown.

IMPORTANT: Use top hole (K) for flat header angle and bottom hole (as shown) for steep header angle. Damage to pump or forming shield may occur if mounting hole does not match header angle. See "Header Angle" in Operation Section.



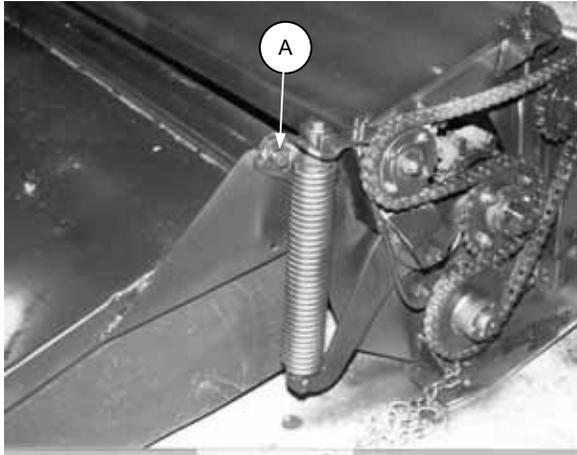
INSTALL FRONT SUPPORTS

INITIAL SET-UP

PREPARING THE 741/742 HAY CONDITIONER

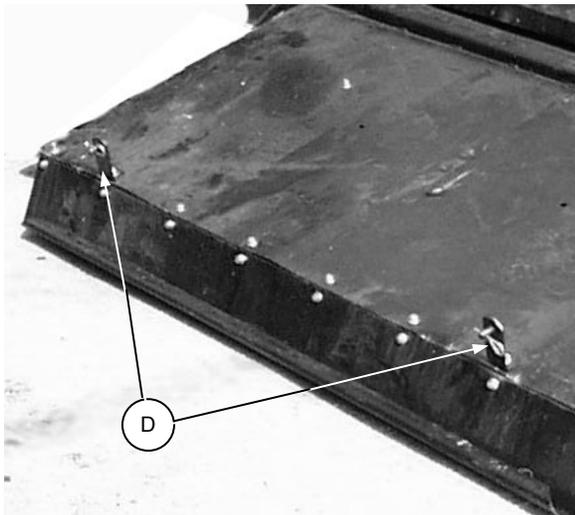
This conditioner is used with Model 942 Multi-Crop and Model 970 series Harvest Headers. For Model 910 and 920 Series Headers, see page 12.

1. Attach hay conditioner forming shields to conditioner as described in Header Operator's Manual, except use top hole (A) as shown.



ATTACH FORMING SHIELDS AT TOP HOLE

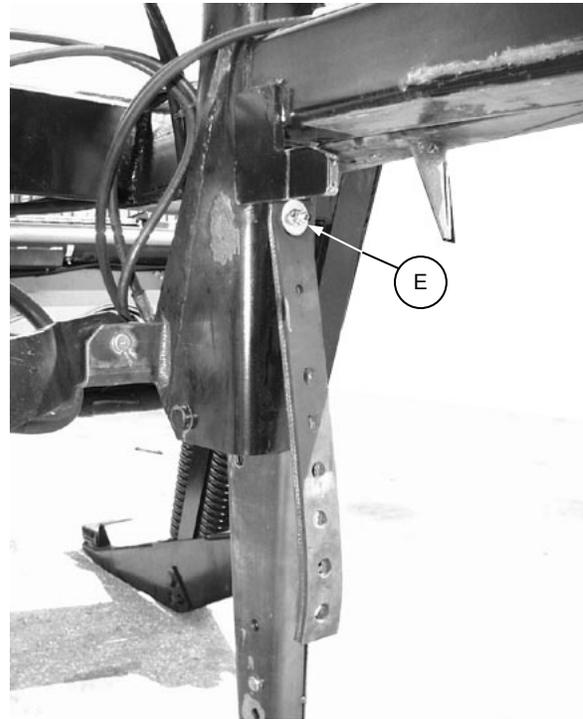
2. Move rear forming shield support brackets (D) to second bolt from each end.



ATTACH REAR SUPPORTS

3. Remove crop deflector from under adapter to allow conditioner forming shield installation. See page 10 for removal instructions.

Remove L-bracket from top of rubber strap and attach rubber strap (E) to adapter frame with 3/8 flange nut and washer supplied with hay conditioner shield.



ATTACH RUBBER STRAPS

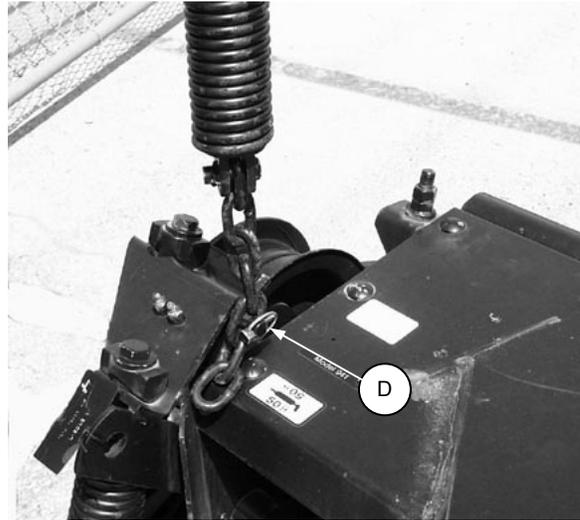
INITIAL SET-UP

PREPARING THE 741/742 HAY CONDITIONER (continued)

4. Attach conditioner float spring to left side of conditioner at pin (D), using the third chain link from the end of the chain. Leave top of spring unattached until hook-up to adapter.

NOTE: When header is in steep angle position, it may be necessary to move to first or second link. See header Operator's Manual for conditioner adjustments.

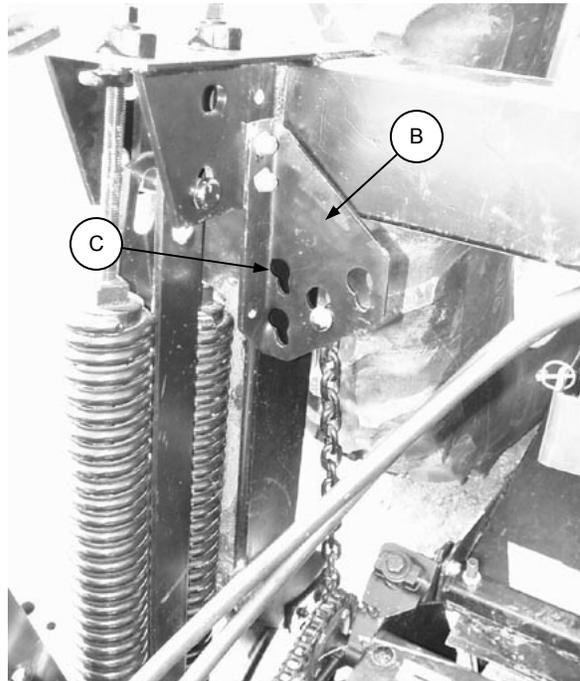
IMPORTANT: *Damage to pump or hay conditioner shield may occur if chain is too short.*



ATTACH FLOAT SPRING TO CONDITIONER

5. Install R/H hay conditioner chain mount (B) to adapter leg with two ½ x 1 inch carriage bolts and nuts.

NOTE: When attaching hay conditioner; to avoid damage to conditioner drive, do not install chain in top inboard hole. If highest setting is required, use outboard hole (C).



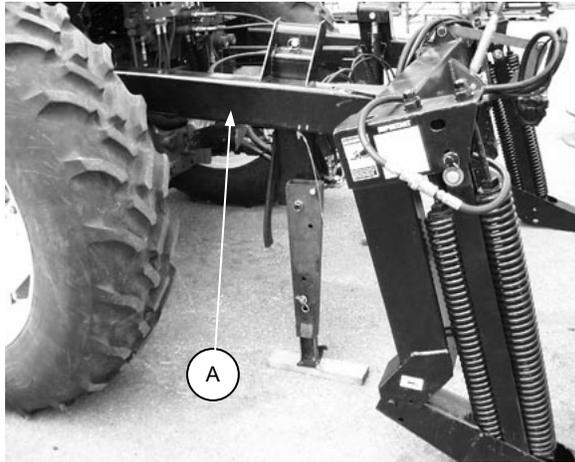
INSTALL R/H CHAIN MOUNT

ATTACHING & DETACHING

ATTACHING ADAPTER TO TRACTOR

The adapter should be disconnected from the header; standing on level ground, with both adapter stands down. See decal on adapter frame for stand adjustment for various tractor/tire combinations. On softer ground, 2x4 blocks under stand pad may be required.

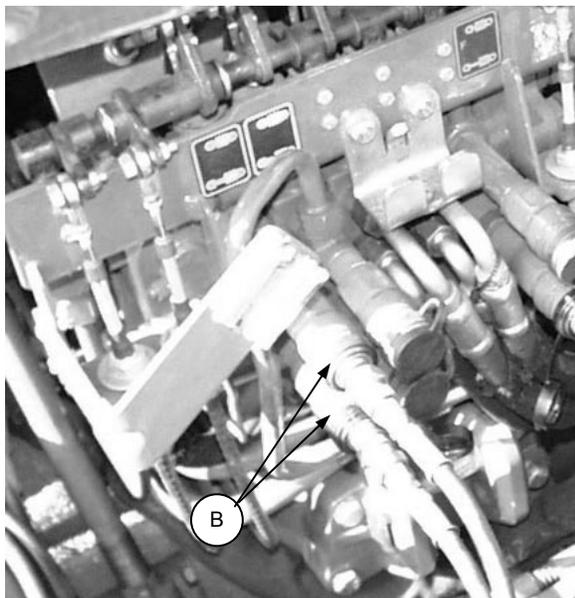
1. Drive the tractor slowly towards the adapter until the 4 x 4 tubes (A) contact the loader frame rails on the tractor.



POSITION TRACTOR FOR HOOK-UP

2. Attach the header lift hoses (B) to the GREEN couplers on the tractor.

NOTE: For TV140 tractor, ensure that "header raise" hose is installed in the EXTEND port.



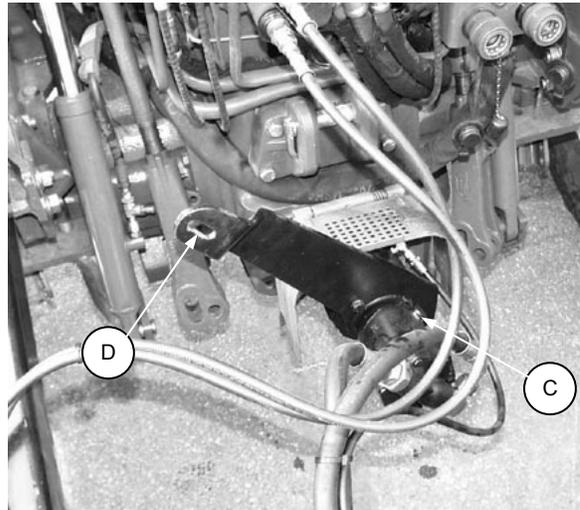
ATTACH LIFT HOSES

3. Raise or lower cylinders as required to drive tractor into adapter frame.

NOTE: Turning slightly from side to side will aide in engaging 4x4 tubes on tractor.

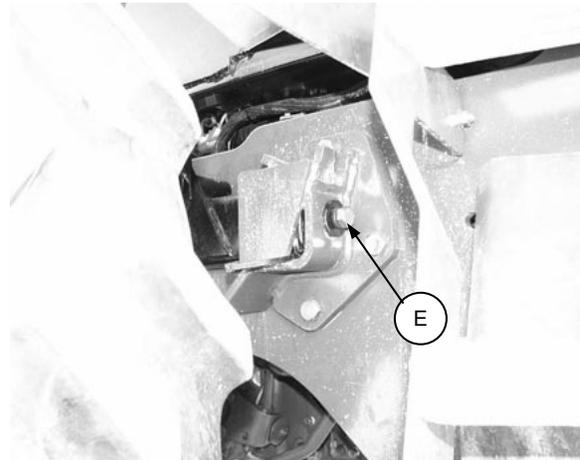
4. Drive partially into adapter. Stop engine and remove key.

5. **For 9030 Tractor & TV140 Tractor with MacDon Header Drive Pump:** Connect pump (C) to tractor PTO. Rotate torque arm (D) to position shown.



CONNECT PUMP:
9030 & TV140 with MacDon PUMP

6. Drive tractor fully into adapter. Install 3/4 NC x 3 bolt, flat washer and lock washer to secure 4 x 4 tubes to loader frame rails at (E), both sides.



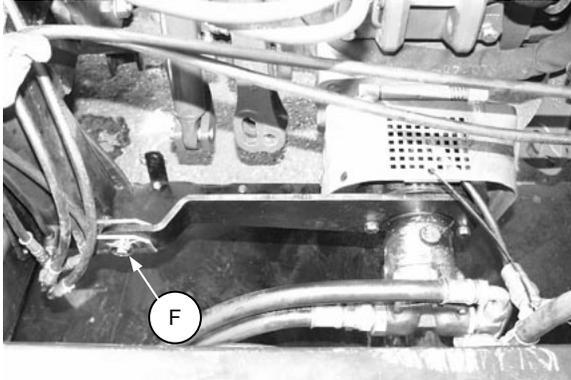
SECURE 4 X 4'S TO TRACTOR

ATTACHING & DETACHING

ATTACHING ADAPTER TO TRACTOR (continued)

7. **For 9030 Tractor & TV140 Tractor with MacDon Header Drive Pump:** Lock pump torque arm to channel with clevis pin and lynch pin at (F).

NOTE: For 9030 Tractor, turn pump torque arm 180° to reverse offset as shown at right.

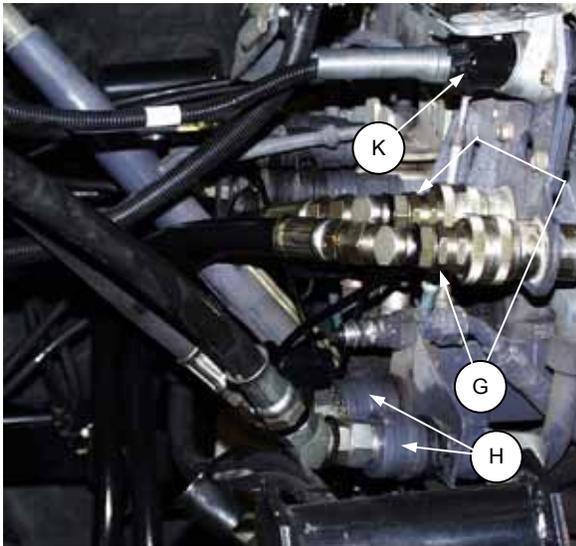


LOCK PUMP TORQUE ARM – TV140

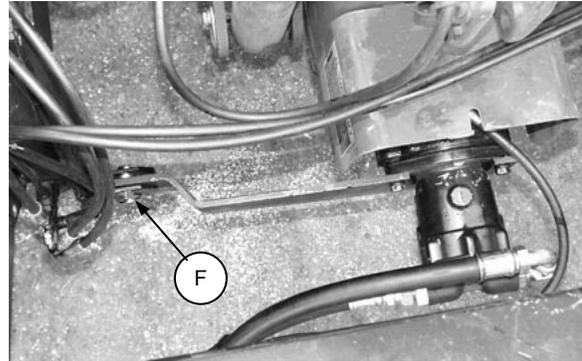
If adjustment of locking channel is required:

- Loosen bolts that secure channel (F) to frame.
- Slide pump onto PTO shaft until torque arm is against shield.
- Slide channel (F) back to contact torque arm and tighten bolts.

8. **For TV140 Tractor with NH Auxiliary Pump:** Connect 3/4" male couplers (G) on hoses coming from relief valve in sickle drive circuit to auxiliary pump couplers on tractor.



CONNECT SICKLE DRIVE HOSES
TV140 with AUXILIARY PUMP



LOCK PUMP TORQUE ARM - 9030

9. a) **For all Headers except Model 910 Series:** Connect conveyor and reel drive 3/4" male couplers (H) to tractor, ensuring RETURN coupler (with black cable tie) goes to the RETURN coupler on the tractor.

To identify 3/4 inch PRESSURE and RETURN couplers on tractor: Return coupler is connected to a single larger hose. For 9030 Tractor, pressure coupler is attached to two smaller hoses, one of which is routed to BLUE-EXTEND coupler. For TV140 Tractor, pressure coupler is attached to a steel line that is routed to BLUE-RETRACT coupler.

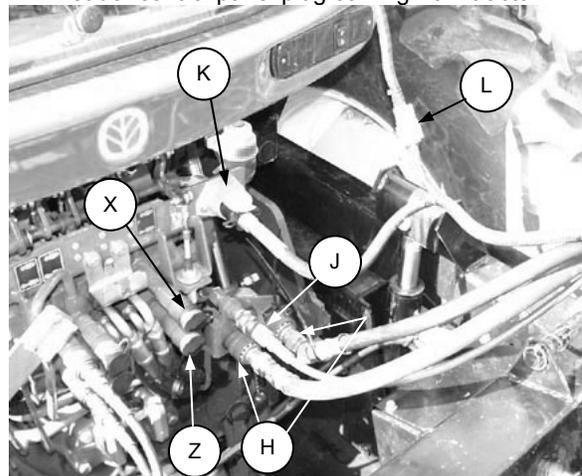
Place the extra black cable tie (provided with adapter) on the tractor RETURN port for ease of identification.

b) **For Model 910 Series Header & Adapter with MacDon Pump Only:** Attach reel drive hose (yellow cable tie) to tractor blue circuit coupler (X). Reduce flow to 8 gpm. Attach conveyor return hose (blue cable tie) to tractor blue circuit coupler (Z). **NOTE:** To connect conveyor hose, order 21855 male coupler (2) and 34420 hose.

c) **For Model 910 Series Header & Adapter with NH Auxiliary Pump:** No conveyor or reel circuit hose connections are required.

10. Connect 1/2" female case drain coupler (J) to tractor coupler.

11. Attach 7 terminal plug from adapter wiring harness into tractor at (K). Attach 12-pin connector (L) to header control panel plug coming from tractor.



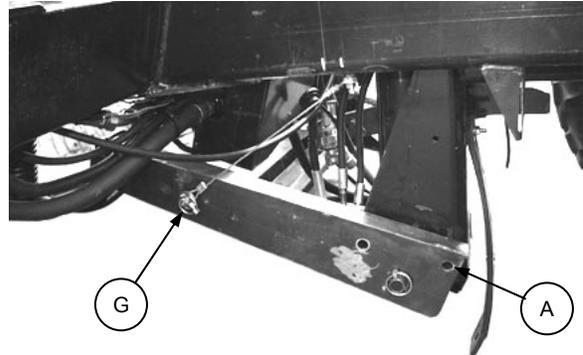
HYDRAULIC & ELECTRICAL CONNECTIONS
(TV140 without AUX. PUMP SHOWN)

ATTACHING & DETACHING

ATTACHING ADAPTER TO TRACTOR (continued)

12. Remove pin from hole (A) and place in storage position (B) on top of frame leg. Place adapter stands in storage position (G). Retract the telescoping foot into the stand to minimize storage length.

NOTE: For adapters with hay conditioner top forming shield attached, stands must be rotated 180° (inside edge to outside) as shown.



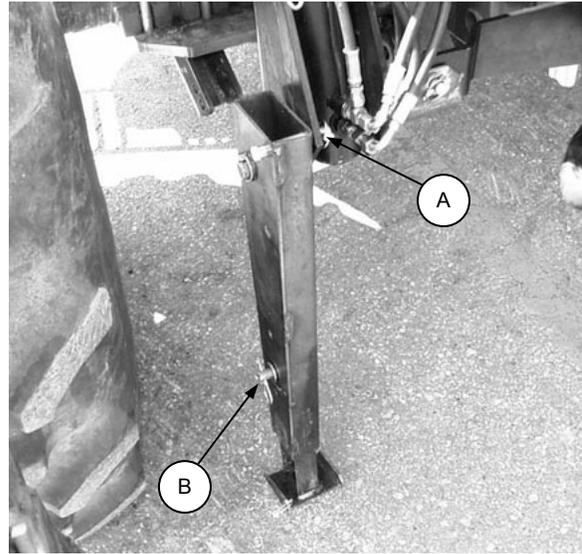
PLACE STANDS IN STORAGE

ATTACHING & DETACHING

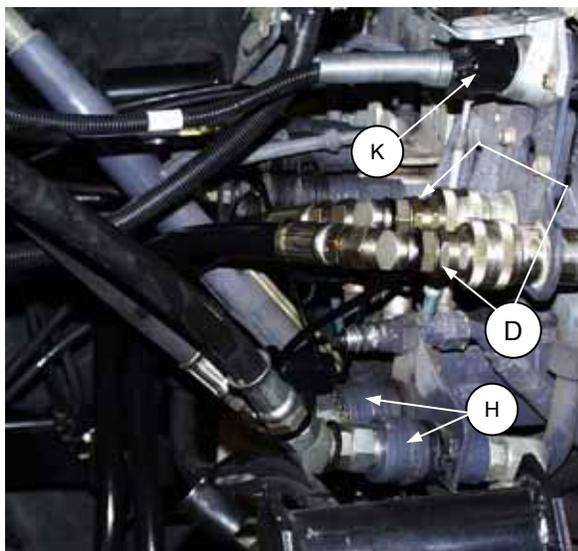
DETACHING ADAPTER FROM TRACTOR

The adapter should be attached to tractor with the header removed. For instruction on detaching adapter **and** header from tractor, see page 28.

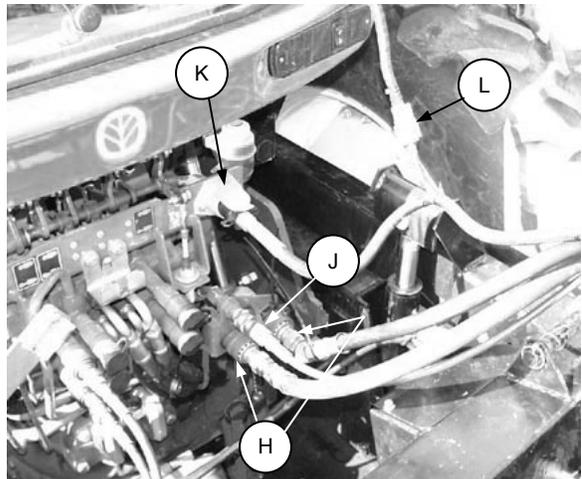
1. Raise the adapter. Stop engine and remove key.
2. Swing the two adapter stands into support position and install clevis pins, washers and lynch pins at (A). Pin (A) is stored on top of frame leg, each side. Extend foot and secure with clevis pin, washer and lynch pin at (B). Lower adapter onto stands.
3. Disconnect wiring harnesses (K) and (L). Disconnect hydraulic hoses at $\frac{3}{4}$ " couplers (H) and $\frac{1}{2}$ " coupler (J). **Leave header lift couplers (G) connected.** Plug or cap all couplers to prevent hydraulic system contamination.
4. **For TV140 Tractor with NH Auxiliary Pump:** Disconnect sickle drive $\frac{3}{4}$ " couplers (D).



ADAPTER STANDS - SUPPORT POSITION

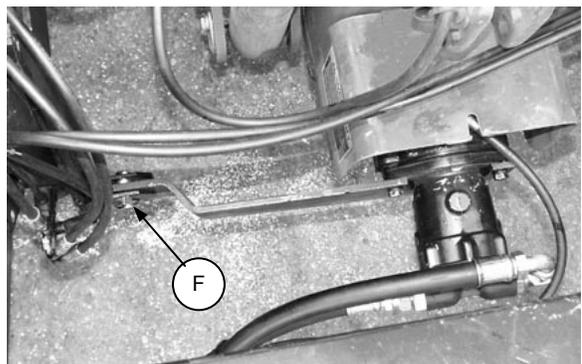


DISCONNECT SICKLE DRIVE HOSES
TV140 with AUXILIARY PUMP



HYDRAULIC & ELECTRICAL
CONNECTIONS
(TV140 without AUX. PUMP SHOWN)

5. **For 9030 Tractor & TV140 Tractor with MacDon Header Drive Pump:** Disconnect torque arm from channel (F) and rotate arm up to clear adapter frame.

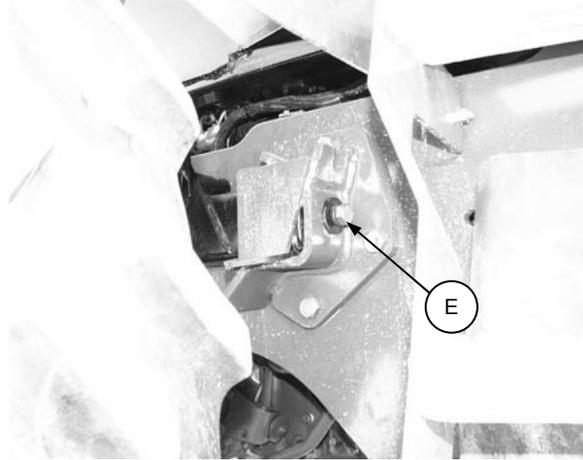


DISCONNECT TORQUE ARM – MD PUMP

ATTACHING & DETACHING

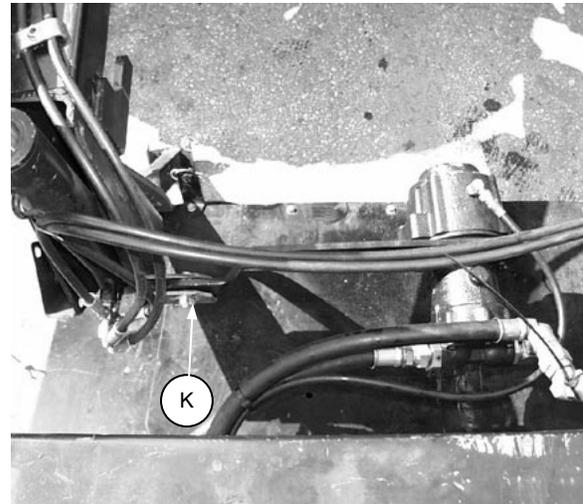
DETACHING ADAPTER FROM TRACTOR

6. Remove bolt (E) from frame, both sides and back partially away from adapter (enough room to stand between tractor and adapter). Stop engine and remove key.



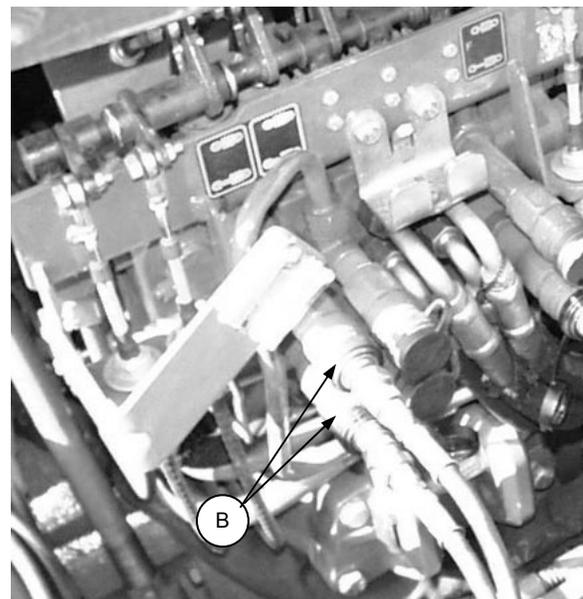
DETACH 4 X 4'S FROM TRACTOR

7. **For 9030 Tractor & TV140 Tractor with MacDon Header Drive Pump:** Disconnect pump from tractor PTO and store on torque arm support (K).



MacDon PUMP STORAGE

8. Back away from adapter until tractor is just clear of 4 x 4 tubes. Be aware of header lift hoses, which are still connected. Stop engine and remove key.
9. Disconnect header lift hoses at (B). Plug or cap all couplers to prevent hydraulic system contamination.



DETACH LIFT HOSES

ATTACHING & DETACHING

ATTACHING HEADER TO TRACTOR AND ADAPTER

The adapter should be attached to the tractor. The header should be in stand position on level ground with the pins removed from header legs.

1.



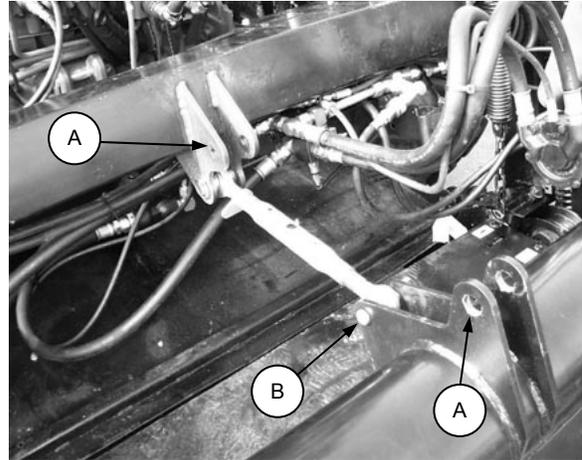
CAUTION: Be sure area is clear of bystanders, then start engine.

2. Slowly drive tractor forward so that adapter lift linkage enters header legs. Continue to drive slowly forward until linkage contacts support plate in the lower header leg, and header nudges forward. Stop engine and remove key.

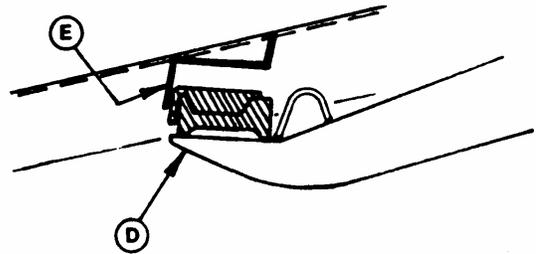
3. Install center link (B) from adapter to header. Adjust length of link if required. See "Header Angle" in Operation section.

IMPORTANT: Use top hole (A) only for 972 Header *without* hay conditioner. Use lower hole for all other Header/Attachment combinations. If top hole is used for 972 Header *with* hay conditioner, damage to conditioner shield and pump may occur.

4. Check that bottom of linkage (D) is properly engaged in header leg, contacting support plate (E).



INSTALL CENTER LINK



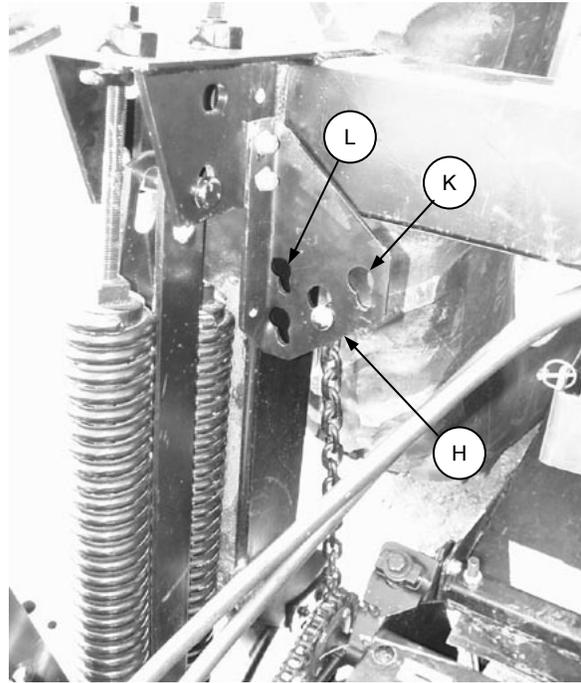
CHECK FOR PROPER ENGAGEMENT

ATTACHING & DETACHING

ATTACHING HEADER TO TRACTOR AND ADAPTER

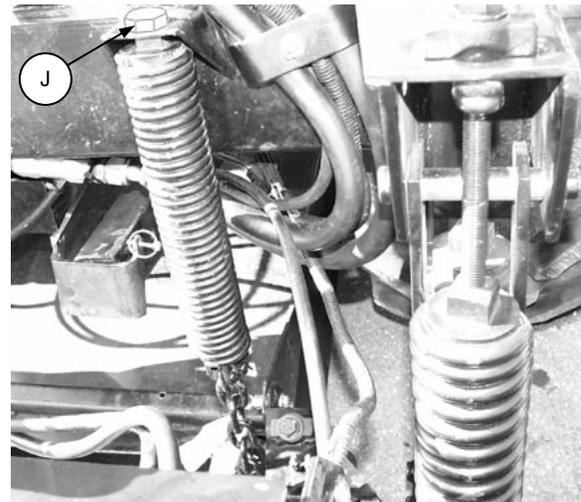
5. Header with 741/742 Hay Conditioner

- a. Attach chain at right side of conditioner to adapter frame at middle hole (H) as shown. **NOTE:** For steeper header angles, lower hole may give better conditioner ground clearance. See Header Operator's Manual for ground clearance adjustment. *To avoid damage to conditioner drive, do not install chain in top inboard hole (K) in this application. If highest setting is required, use outboard hole (L).*



ATTACH CHAIN TO ADAPTER FRAME
741/742 HAY CONDITIONER

- b. Attach conditioner float spring to adapter frame at (J), using 5/8 x 4-½ thread full length hex bolt. Turn bolt into spring until spring insert contacts mounting bracket. (Full spring extension.)
- c. **IMPORTANT:** Support rear of forming shield by attaching to rubber straps *at longest strap length to ensure adequate clearance between pump and hay conditioner shield as header is raised.* (Once header is raised, shorten strap length if desired.)
6. Raise the header. Stop engine and remove key.



ATTACH SPRING TO ADAPTER FRAME
741/742 HAY CONDITIONER

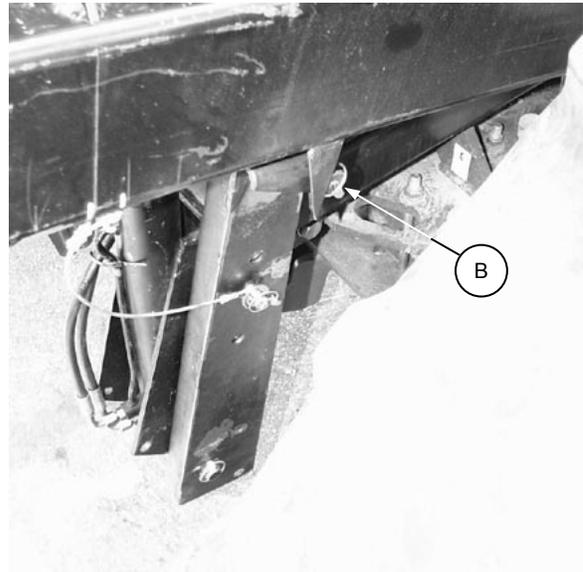
ATTACHING & DETACHING

ATTACHING HEADER TO TRACTOR AND ADAPTER (continued)



DANGER: To avoid bodily injury from fall of raised header, always set adapter stands in prop position when working under raised header.

7. Remove lynch pin at foot of adapter stand and swing adapter stands into prop position. Replace lynch pin at (B) to lock the position. Repeat at other side.



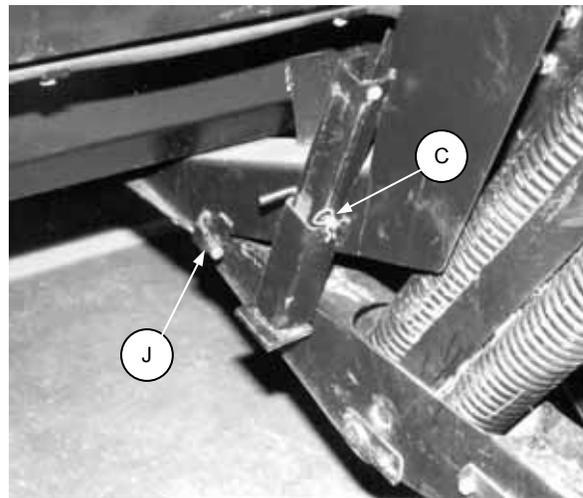
ADAPTER STANDS – PROP POSITION

8. Install pin through header leg, engaging the U-bracket in lift linkage and securing adapter to header leg, both sides.

For 910, 920, 932 & 942 Headers secure L-pin (J) behind lug.

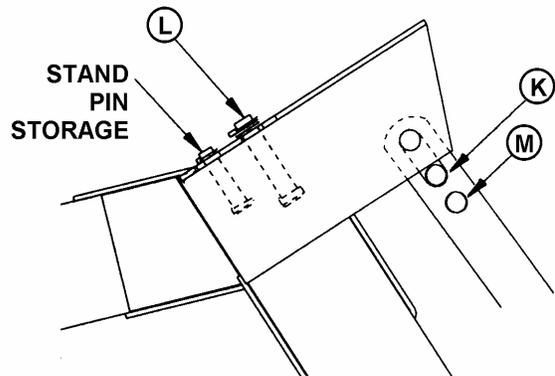
For 970 Series and 912/922/933 Headers secure clevis pin with lynch pin.

9. Raise the header stand to storage position (C).



LOCK ADAPTER TO HEADER LEG

10. At right hand side, move float lockout pin from engaged position (K) to storage position (L). At left hand side, move float lockout pin from engaged position (M) to storage position (L).



MOVE FLOAT LOCK-OUT PINS
TO STORAGE POSITION

ATTACHING & DETACHING

ATTACHING HEADER TO TRACTOR AND ADAPTER (continued)

11. Depending on header type, connect from zero to five hydraulic hoses between header and adapter/tractor:

942 and 970 Series Headers - 5 hoses:

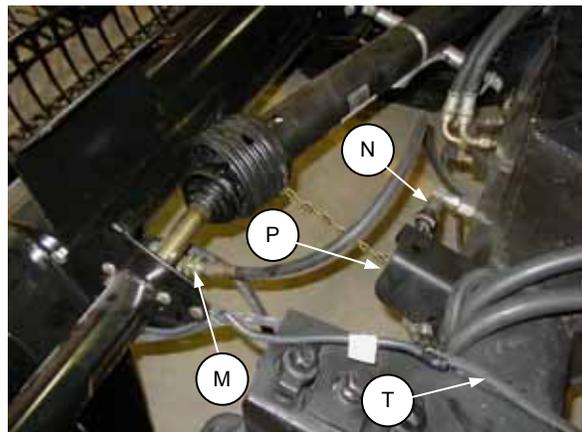
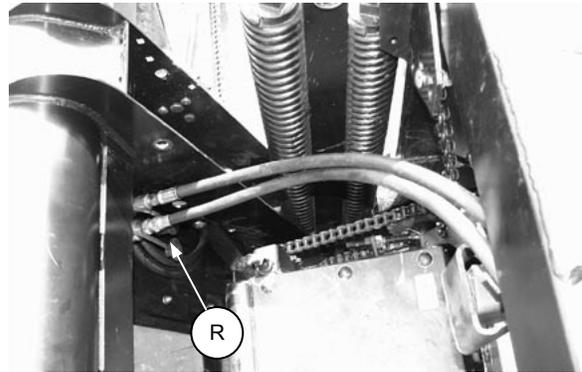
- reel drive pressure and return near right header leg (R).
- reel lift (S) to TAN-EXTEND coupler at TV140 tractor. (To TAN-RETRACT on 9030 tractor.)
NOTE: Wrap reel lift hose (S) around adapter hoses a couple of times to take up slack as shown.
- conveyor drive pressure (M) near left header leg.
- conveyor drive return (N) near left adapter lower link.

920/930 Series Auger Headers - 3 hoses:

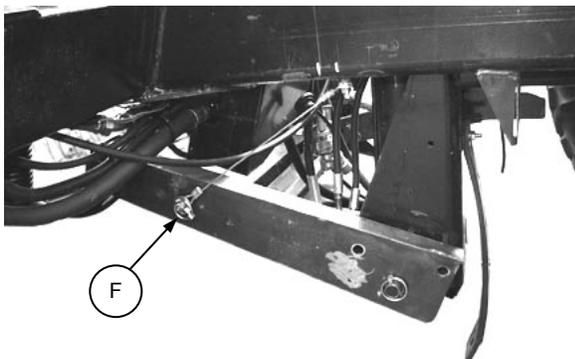
- reel drive pressure and return near right header leg.
- reel drive auxiliary pressure near left header leg.

910 Series Headers - no hoses.

12. Connect adapter wiring harness(es) to header harness (T) near header left leg.
13. Connect driveline from adapter to header. Pull back on spring loaded collar on end of yoke and slide onto header shaft. Ensure collar locks in place. Driveline chain remains attached at hole in storage bracket (P).
14. Swing adapter stands back to the storage position (F). Lower header and adapter to ground.



HEADER CONNECTIONS



ADAPTER STANDS – STORAGE POSITION

ATTACHING & DETACHING

DETACHING HEADER FROM TRACTOR AND ADAPTER

Using this procedure, adapter will remain attached to the tractor. This would be appropriate when header is to be used on another power unit. Instructions for detaching both header and adapter from tractor are given on page 28.

1. Choose a level area.
2. Disconnect adapter wiring harness(es) at the header.
3. Depending on header type, disconnect from zero to five hydraulic hoses between header and tractor/adapter. Where possible, connect hoses to each other for storage. Plug or cap all other couplers to prevent hydraulic system contamination.
4. Detach driveline from header shaft. Attach driveline to storage bracket (A). Shield chain remains attached at (E).
5. Lower the reel and raise the header. Stop engine and remove key.



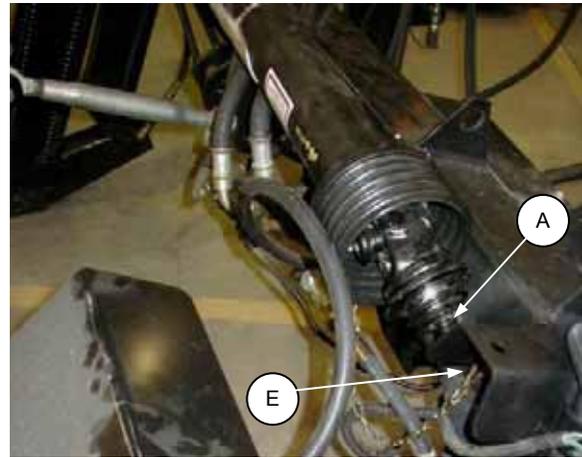
DANGER: To avoid bodily injury from fall of raised header, always set adapter stands in prop position when working under raised header.

6. Remove lynch pin at foot of adapter stand and swing adapter stands into prop position. Replace lynch pin at (B) to lock the position. Repeat at other side.
7. Move float lock-out pin from storage position (C) to engaged position (D), both sides.

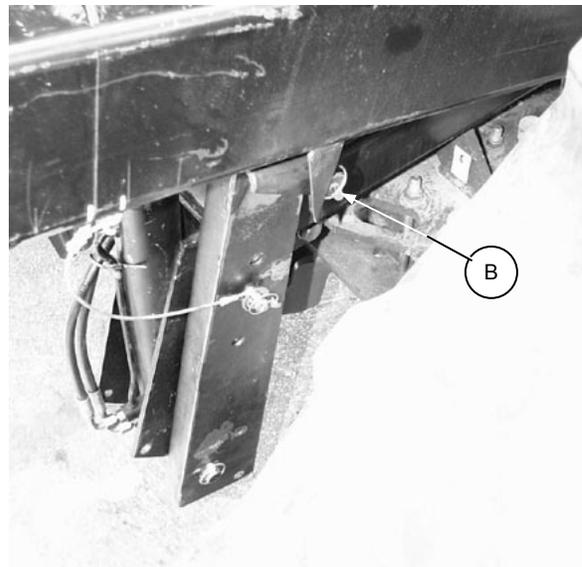


R/H FLOAT LOCK-OUT PIN - ENGAGED

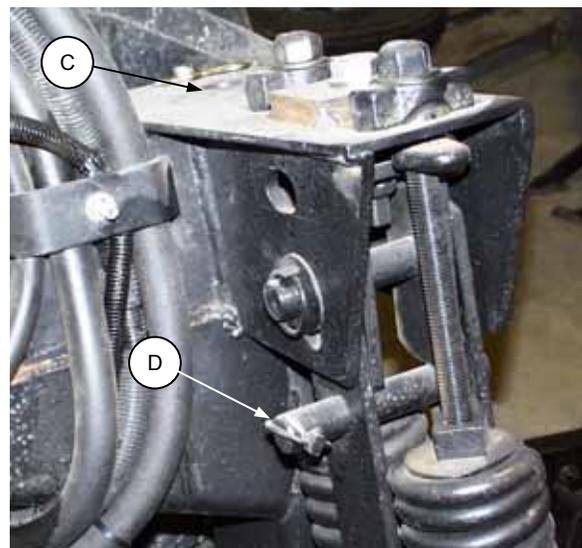
8. Lower the header stand. If the ground is soft, place a piece of wood under stand.



DRIVELINE STORAGE POSITION



ADAPTER STANDS – PROP POSITION

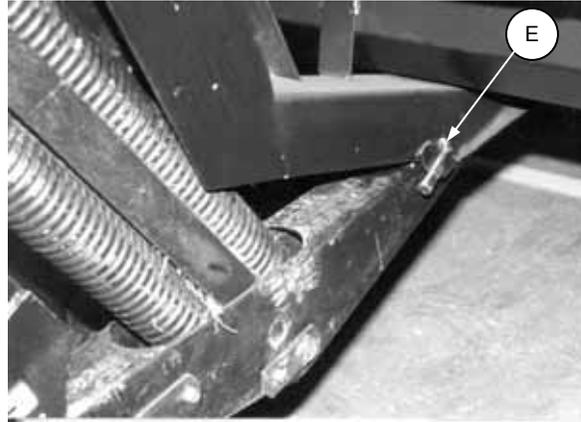


L/H FLOAT LOCK-OUT PIN - ENGAGED

ATTACHING & DETACHING

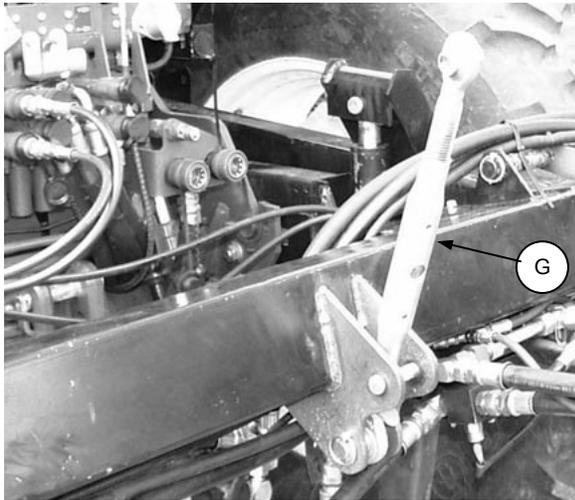
DETACHING HEADER FROM TRACTOR AND ADAPTER (continued)

9. Remove pins (E) from header legs. (When detaching procedure is complete, replace pins in header legs for storage.)
10. Swing adapter stands back to the storage position (F).
11. Lower header. Stop engine and remove key.

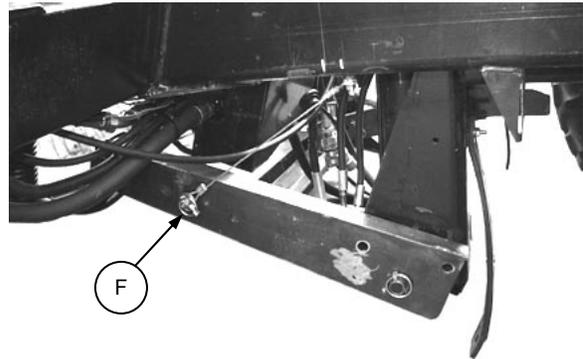


REMOVE PINS FROM HEADER LEGS
942 HEADER SHOWN

12. Disconnect center link at header and raise to storage position (G).

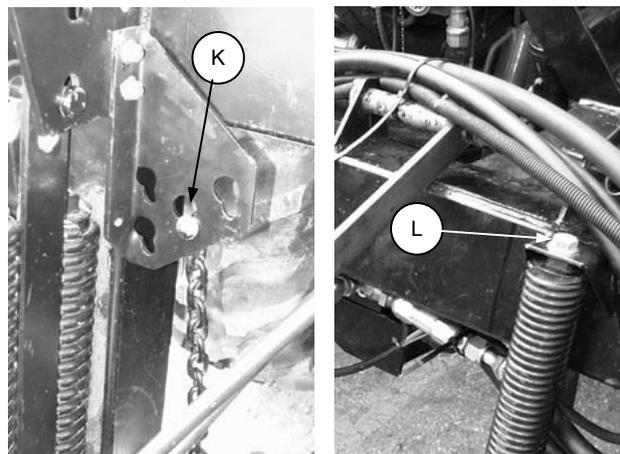


DISCONNECT CENTER LINK



ADAPTER STANDS – STORAGE POSITION

13. 741/742 Hay Conditioner
 - a. Detach chain at right side of conditioner from adapter frame at (K).
 - b. Detach conditioner float spring from adapter by removing bolt (L) or detaching chain at top of conditioner.
14. Slowly back away from header.



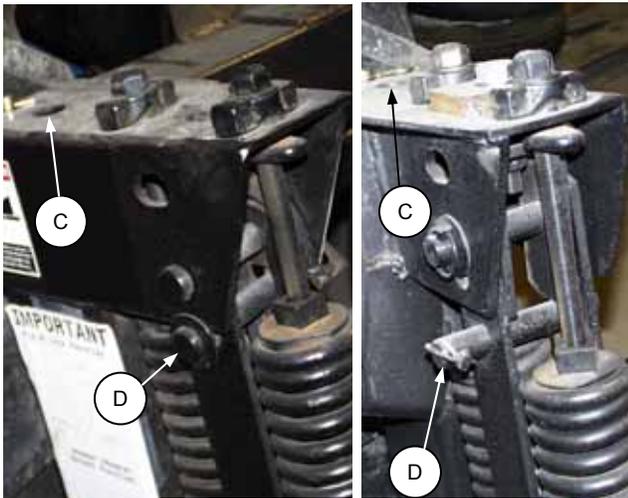
DETACH CHAIN & FLOAT SPRING
741/742 HAY CONDITIONER

ATTACHING & DETACHING

DETACHING HEADER AND ADAPTER FROM TRACTOR

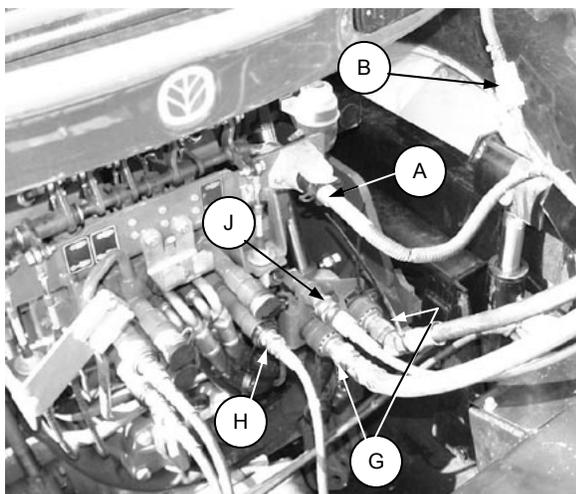
Using this procedure, adapter will remain attached to the header. This would be appropriate when tractor is required for other use. Instructions for detaching header only from adapter and tractor are given beginning on page 26.

1. Choose a level area. Lower the reel and raise the header. Stop engine and remove key.
2. Move float lock-out pin from storage position (C) to engaged position (D), both sides.



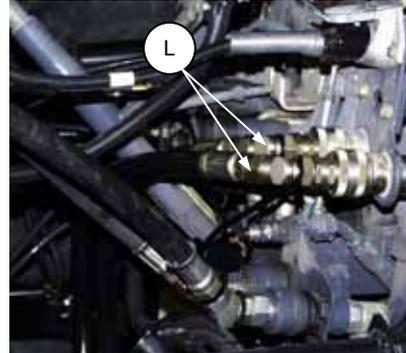
R/H SIDE
L/H SIDE
FLOAT LOCK-OUT PINS - ENGAGED

3. Lower header. Stop engine and remove key.
4. Disconnect wiring harnesses (A) and (B). Disconnect hydraulic hoses at $\frac{3}{4}$ " couplers (G), reel lift coupler (H) and $\frac{1}{2}$ " coupler (J). **Leave header lift couplers (K) connected.** Plug or cap all couplers to prevent hydraulic system contamination.



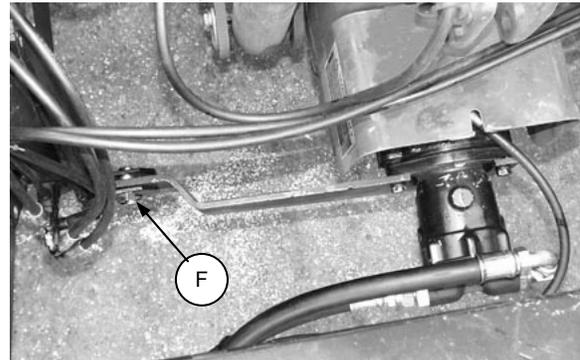
DISCONNECT HYDRAULICS & ELECTRICAL
(TV140 without AUX. PUMP SHOWN)

5. **For TV140 Tractor with NH Auxiliary Pump:** Disconnect sickle drive $\frac{3}{4}$ " couplers (L).



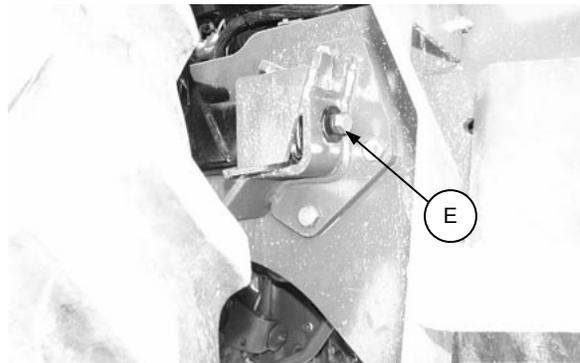
DISCONNECT SICKLE DRIVE HOSES
TV140 with AUXILIARY PUMP

6. **For 9030 Tractor & TV140 Tractor with MacDon Header drive Pump:** Disconnect torque arm from channel (F) and rotate arm up to clear adapter frame.



DISCONNECT TORQUE ARM – MD PUMP

7. Remove bolt (E) from frame, both sides and back partially away from adapter (enough room to stand between tractor and adapter). Stop engine and remove key.

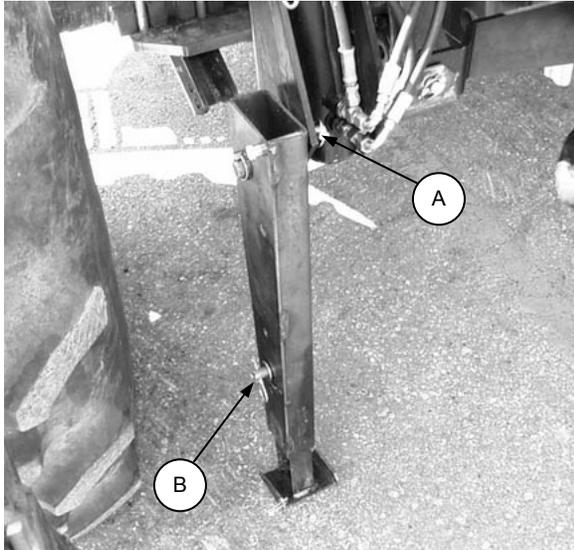


DETACH 4 X 4'S FROM TRACTOR

ATTACHING & DETACHING

DETACHING HEADER AND ADAPTER FROM TRACTOR (continued)

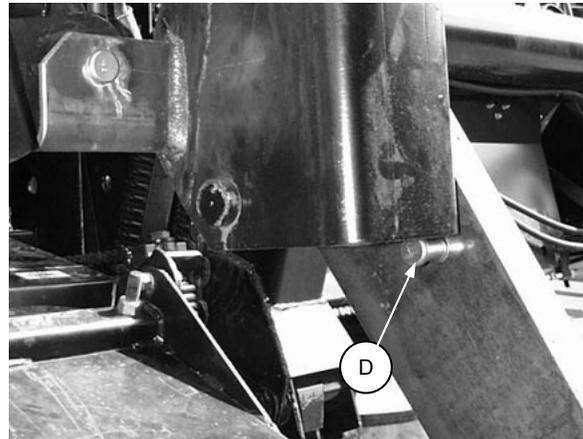
8. Swing the two adapter stands into support position and install clevis pins, washers and lynch pins at (A). (Retrieve pin A from storage position on top of frame leg.) Extend foot and secure with clevis pin, washer and lynch pin at (B). If the ground is soft, place a piece of wood under stands.



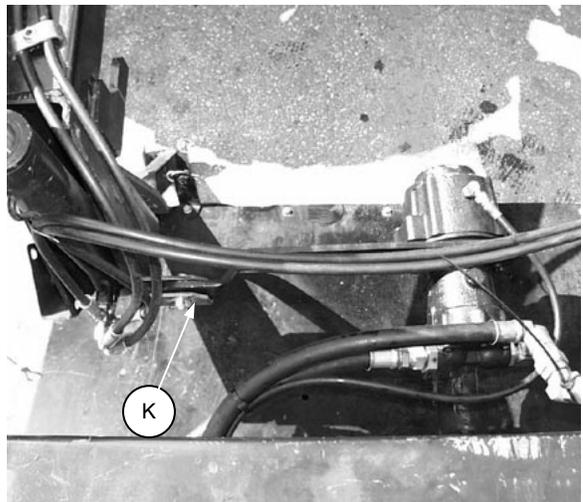
ADAPTER STANDS – SUPPORT POSITION
WITHOUT HAY CONDITIONER

9. For 9030 Tractor & TV140 Tractor with MacDon Header Drive Pump: Disconnect pump from tractor PTO and store on torque arm support (K).
10. Extend lift cylinders until adapter is supported on stands.
11. Back away from adapter until tractor is just clear of 4 x 4 tubes. Be aware of header lift hoses, which are still connected. Stop engine and remove key.
12. Disconnect header lift hoses at tractor. Plug or cap all couplers to prevent hydraulic system contamination.

NOTE: For units with hay conditioner, stand position is as shown at (C). Be sure that frame is resting on pin at (D). If top forming shield interferes with header stands, extend header lift cylinders until it clears.



ADAPTER STANDS – SUPPORT POSITION
WITH HAY CONDITIONER



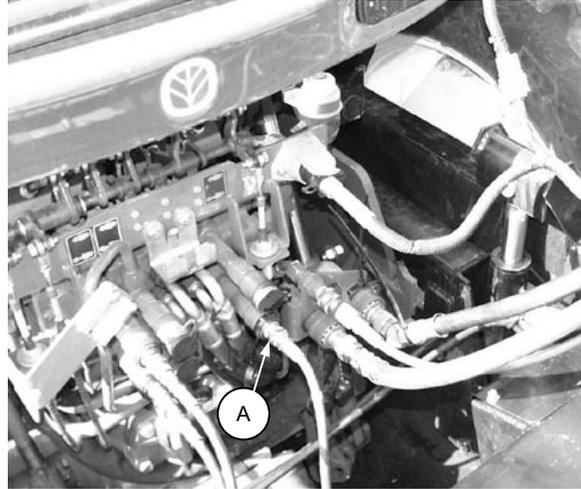
MacDon PUMP STORAGE

ATTACHING & DETACHING

ATTACHING HEADER AND ADAPTER TO TRACTOR

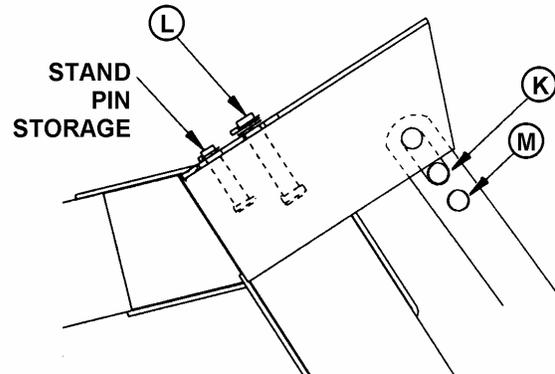
The adapter should be connected to the header, with float lock-out pins in engaged position.

1. Choose a level area.
2. Follow the procedure for connecting adapter to tractor on pages 17 to 19.
3. For 942 and 970 Series headers, when connecting hydraulics, also connect reel lift coupler (A) to TAN-EXTEND port on TV140 tractor or to TAN-RETRACT port on 9030 tractor.



HYDRAULIC & ELECTRICAL CONNECTIONS
TV140 without AUX. PUMP SHOWN

4. After attaching is complete, raise header and:
At right hand side, move float lock-out pin from engaged position (K) to storage position (L). At left hand side, move float lock-out pin from engaged position (M) to storage position (L).



FLOAT LOCK-OUT PINS – STORAGE

OPERATION

HEADER CONTROLS



WARNING: To avoid injury caused by unexpected movement of reel and/or conveyor, always disengage the blue hydraulic circuit before shutting the engine off. Reel and conveyor will move if engine is started with blue circuit engaged.

Blue Hydraulic Control Lever – Engage blue hydraulic circuit before engaging the PTO or auxiliary pump. The blue circuit provides oil for the reel and conveyor drives and supercharges the PTO mounted MacDon pump if equipped. Set flow to 18 gallons per minute (except for Model 910 Series Headers set to 8 gpm). If a flow meter is not available, set the flow as follows:

All except 910 Series Headers:

- Set reel and conveyor speed to maximum.
- Increase flow in blue circuit until reel and/or conveyors no longer increase in speed.

For 910 Series Headers only, set pressure (at operating temperature) to read 50 psi (345 kPa) at coupler with yellow cable tie.

PTO Clutch (units with MacDon Header Drive Pump) – After engaging the blue hydraulic circuit, engage the PTO clutch to start the sickle drive.

IMPORTANT: To prevent damage to the pump, blue hydraulic circuit must be on before PTO is engaged.

Auxiliary Pump Switch (TV140 Tractors with New Holland Auxiliary Pump) – After engaging the blue hydraulic circuit, turn auxiliary pump switch to ON to start sickle drive.

IMPORTANT: Set flow to 25 gallons per minute. If a flow meter is not available, adjust flow until sickle drive shaft speed is 1100 rpm, measured at the rear (driver) pulley inside left end sheet of header. Damage to sickle drive motor seal may occur if flow is set too high.

Green Hydraulic Control Lever - Controls the header lift on all header models.

Tan Hydraulic Control Lever - Controls the reel lift on 942 and 970 Series header models.

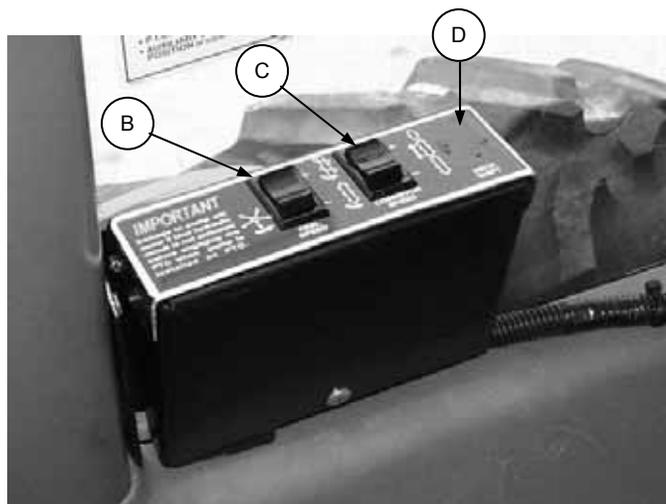
Green and Tan Flow Control Dials - Control the lift/lower rate of the header and reel respectively. Set to operator preference. **NOTE:** If flow to green and tan circuits is set too high, blue circuit flow may be reduced.

See Tractor Operator's Manual for location and operation of the above controls.

Reel Speed - Press plus (+) side of switch (B) to increase reel speed and minus (-) side to decrease. See header Operator's Manual for speed range.

Conveyor Speed - Press plus (+) side of switch (C) to increase conveyor speed and minus (-) side to decrease. See header Operator's Manual for speed range.

Deck Shift (970 Series Hydraulic Shift Header Only) – Deck shift switch is installed in location (D). See "Preparing the Tractor". Press left side of rocker switch (not shown) to shift decks to the left and reverse draper travel. Press right side of switch to shift decks to the right and reverse draper travel. For center delivery, move rocker to center position.



REEL SPEED / CONVEYOR SPEED /
DECK SHIFT CONTROLS

OPERATION

HEADER LEVELLING

NOTE: Adjust header level before adjusting header flotation.

To level header:

1. Ensure pins (G) are at the top of slots in bars (F) on both sides.
2. Loosen off jam nut on header levelling bolt (E). Access to nut is through slot (D).
3. Adjust bolt (E) until header is level.
4. Tighten jam nut to secure the position.

HEADER FLOTATION

IMPORTANT: To avoid

- frequent breakage of sickle components
- scooping soil
- soil build-up at cutterbar in wet conditions,

set header float as light as possible without causing excessive bouncing.

Ensure float indicator (C) is at bottom of gauge and stays in the 0 – 3 range during operation. Damage to header and adapter may occur when operating above 5 on the gauge.

Float settings vary with header type. For draper headers under normal conditions, adjust float spring tension so 50 to 70 lbs. force (220 to 300 N) is required to lift cutterbar at each end. See recommended float setting in your Header Operator's Manual.

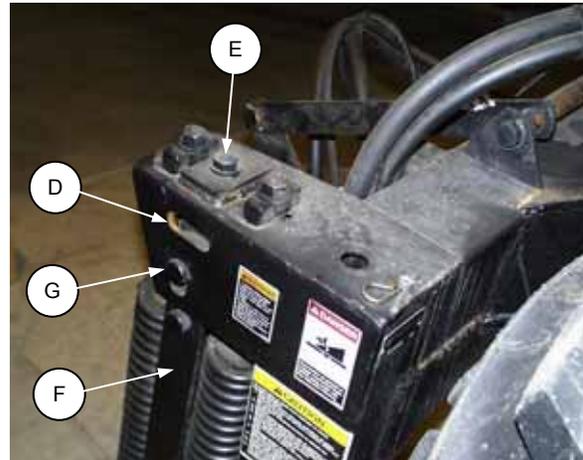
To adjust header float on adapter:

1. Lower cutterbar to the ground.
2. Loosen springs, if required, so that both working pins (A) are tight in the slots as shown. **NOTE:** The slots provide the float range. Pin (A) is shown at the bottom of the float range.
3. Tighten bolts (B) (two per side) to increase float (which makes header lighter at cutting height). Loosen bolts to decrease float (which makes header heavier at cutting height).

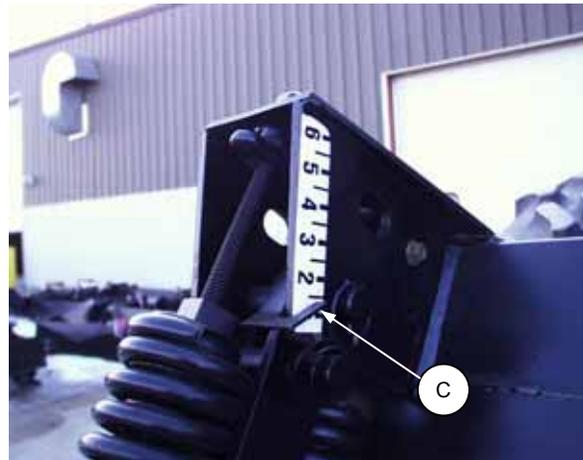
NOTE: Both springs on one side should be adjusted equally (same exposed bolt length). Due to weight differences side-to-side, adjustments will differ from one leg to the other.

4. When adjustment is complete, force required to lift cutterbar should be approximately the same at both ends. Check that both pins (A) are tight in the slots, as shown, with the pin against the bottom of the slot in adapter frame, and against the top of the slot in vertical link (V). If not, springs have been over-tightened, and should be loosened to provide proper float.

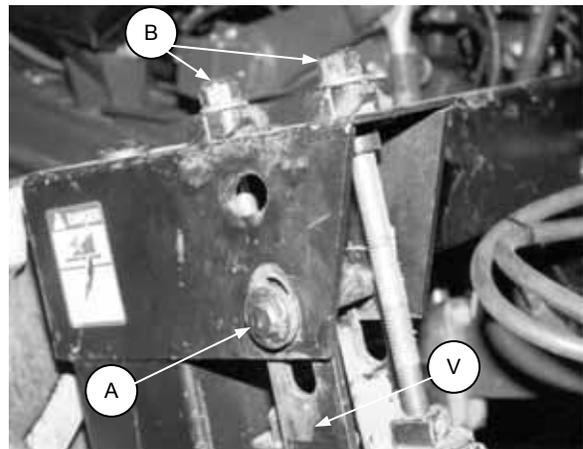
NOTE: To determine if header is floating at cutting height, check for clearance between pin (A) and the bottom of slot in vertical link (V). If there is no clearance, header is not floating.



HEADER LEVELING



FLOAT GAUGE



FLOAT ADJUSTMENT

OPERATION

HEADER ANGLE

Header angle is adjustable by changing the length of the center link between header and adapter.

See header Operator's Manual for header angle adjustment ranges.

IMPORTANT: A flatter header angle is recommended for normal conditions. A flatter angle reduces sickle section breakage and reduces soil build-up at the cutterbar in wet conditions.

A steeper header angle is recommended when using a hay conditioner, when cutting very close to the ground, or for better lifting action of down crops.

NOTE: Center link is shown mounted in lower of two positions. Use the top mounting holes only for 970 Series Headers *without* hay conditioner. Use lower hole for all other Header/Attachment combinations. If top hole is used for 970 Series Headers *with* hay conditioner, damage to conditioner shield and pump may occur.

To adjust header angle:

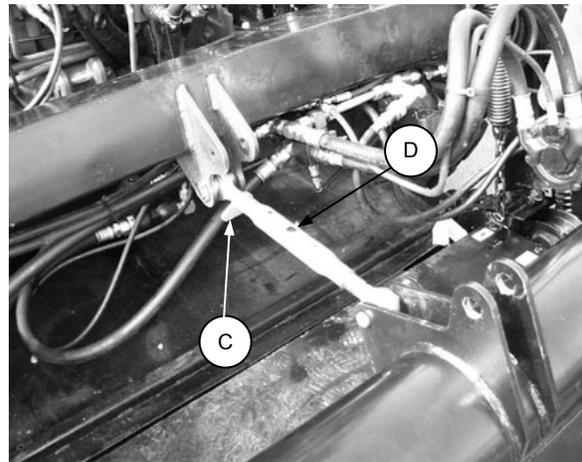
1. Unlock collar (C) by tapping it in a counter-clockwise direction.
2. Using a long punch in hole (D), turn the center link until the desired header angle is reached. Shortening the link will give a flatter header angle, while lengthening the link provides steeper angles.
3. Lock collar (C) against link body by tapping in a clockwise direction to secure the position.

Headers with 721/742 Hay Conditioner (910/920 Series Auger Headers)

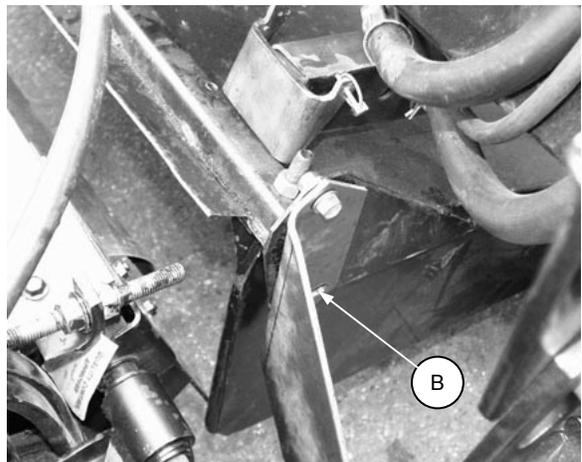
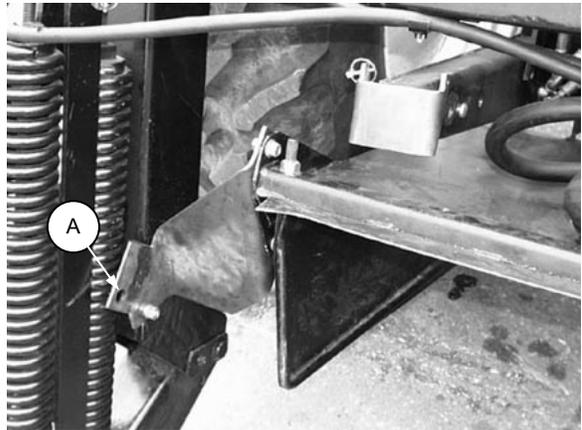
To provide proper clearance between hay conditioner forming shields and pump on tractor PTO, shield height must be adjusted to suit header angle.

Mount shields in top hole (A) for flat header angle and bottom hole, as shown, for steep header angle.

To compensate for small changes in header angle; shield position with respect to hay conditioner can be adjusted by repositioning hardware in slot (B).



HEADER ANGLE ADJUSTMENT



721/742 CONDITIONER FORMING SHIELDS

MAINTENANCE/SERVICE

SERVICE PROCEDURES



CAUTION: To avoid personal injury, before servicing machine or opening drive covers:

1. Fully lower header and adapter. If it is necessary to service header in the raised position, first engage lift cylinder stop.
2. Disengage header drive clutch.
3. Stop engine and remove key.
4. Engage park brake.
5. Wait for all moving parts to stop.

Park on level surface when possible. Follow all recommendations in your Tractor Operator's Manual.

Wear close-fitting clothing and cover long hair. Never wear dangling items such as scarves or bracelets.

Wear protective shoes with slip resistant soles, a hard hat, protective glasses or goggles and heavy gloves.

Be prepared if an accident should occur. Know where the first aid kit and fire extinguisher are located and how to use them.

Keep the service area clean and dry. Wet or oily floors are slippery. Wet spots can be dangerous when working with electrical equipment. Be sure all electrical outlets and tools are properly grounded.

Use adequate light for the job at hand.

Replace all shields removed or opened for service.

Use only service and repair parts made or approved by the equipment manufacturer. Substituted parts may not meet strength, design or safety requirements.

Keep the machine clean. Never use gasoline, naphtha or any volatile material for cleaning purposes. These materials may be toxic and/or flammable.

MAINTENANCE/SERVICE

GREASING THE ADAPTER

Use an SAE Multi-Purpose High Temperature Grease with Extreme Pressure (EP) Performance and containing at least 1.5% molybdenum disulphide. Also acceptable is an SAE Multi-Purpose Lithium Base Grease.

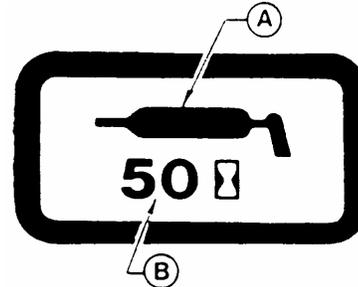
The following greasing points are marked on the adapter by decals showing a grease gun (A), and grease interval (B) in hours of operation. Use the hour meter in the tractor cab and the "Maintenance Checklist" provided in the Header Operator's Manual to keep track of scheduled maintenance.

Procedure:

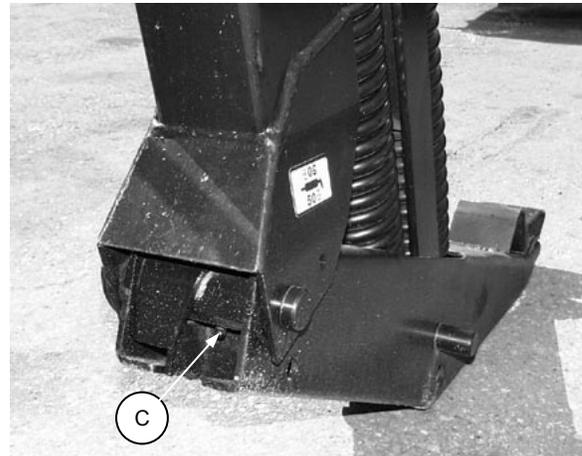
1. Wipe grease fitting with a clean cloth before greasing, to avoid injecting dirt and grit.
2. Inject grease through fitting with grease gun until grease overflows fitting.
3. Leave excess grease on fitting to keep out dirt.
4. Replace any loose or broken fittings immediately.
5. If fitting will not take grease, remove and clean thoroughly. Also clean lubricant passageway. Replace fitting if necessary.

50 Hours

1. Lower Link Bushings (C) - two fittings



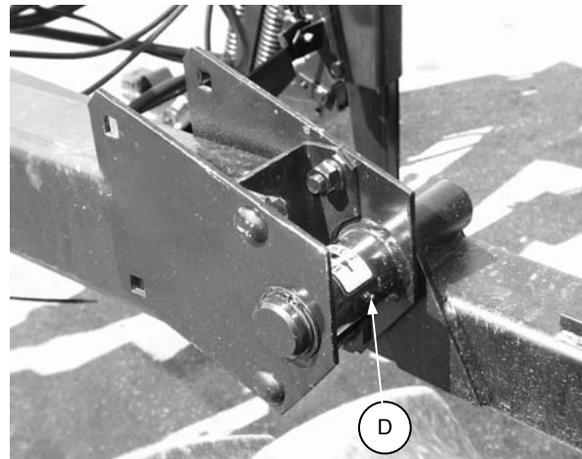
SAMPLE GREASE DECAL



LOWER LINK BUSHINGS

2. Upper Arm Bushings (D) - two fittings

NOTE: Add these grease points to the Maintenance Checklist in the Header Operator's Manual.

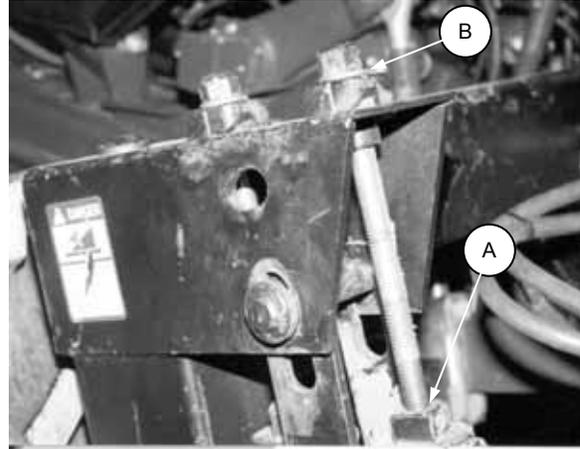


UPPER ARM BUSHINGS

MAINTENANCE/SERVICE

FLOAT SPRING HARDWARE

To prevent premature wear, apply an anti-seize/lubricating compound to header float spring adjustment bolt threads (A) and washers (B) (four of each) before adjusting header floatation.



LUBRICATE FLOAT SPRING HARDWARE

HYDRAULIC SYSTEM

Hydraulic Hoses - Check daily for leakage.



WARNING: Avoid high-pressure fluids. Escaping fluid can penetrate the skin causing serious injury. Relieve pressure before disconnecting hydraulic lines.

Tighten all connections before applying pressure. Keep hands and body away from pin-holes and nozzles which eject fluids under high pressure. Use a piece of cardboard or paper to search for leaks. **IF ANY** fluid is injected into the skin, it must be surgically removed within a few hours by a doctor familiar with this type of injury or gangrene may result.



AVOID HIGH-PRESSURE FLUIDS

IMPORTANT:

- Ensure all hydraulic couplings are properly mated and fully engaged before operating header.
- To avoid wasting oil, do not direct more flow to the header drive hydraulic circuit than can be handled by the adapter flow control (maximum 18 GPM). See "Header Controls" in Operation section.
- Keep hydraulic coupler tips and connectors clean. Dust, dirt, water and foreign material are the major causes of hydraulic system damage.
- To prevent improper mixing of oils: If header is to be switched back and forth from combine to Bi-Directional tractor, change oil in tractor hydraulic system and in combine adapter hydraulic reservoir to match combine system.



CHECK PROPERLY FOR LEAKS

MAINTENANCE/SERVICE

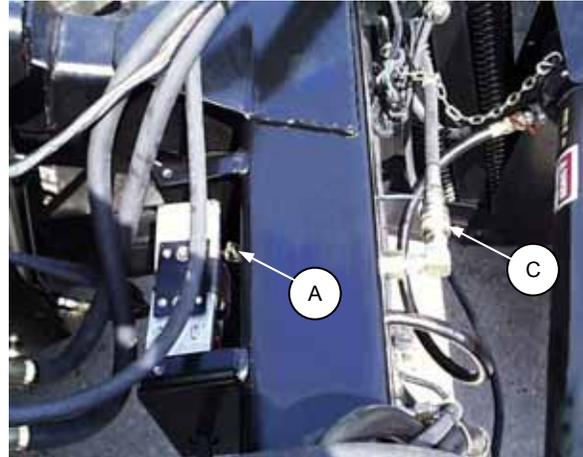
HYDRAULIC SYSTEM (continued)

FLOW CONTROL BLOCK: Flow control block provides hydraulic power to the reel and conveyor drives with flow variable from 5 to 8 gallons per minute (gpm) to each circuit.

Header Drive Relief Valve: Overload protection for the reel and conveyor drives is provided by an internal relief valve (A) in the flow control block.

SICKLE DRIVE PUMP: Depending on the hydraulic configuration of your adapter, the MacDon header drive pump or the New Holland auxiliary pump provides hydraulic power to the sickle drive with 25 gpm flow available in the closed loop.

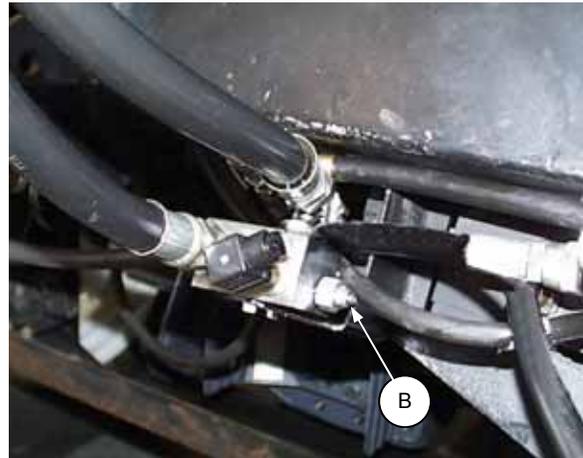
Sickle Drive Pump Relief Valve: Overload protection for the sickle drive pump is provided by an external relief valve (B).



HEADER DRIVE RELIEF VALVE

To check and adjust relief pressures:

1. Always attach pressure gauge to a hose that is long enough to allow gauge to be positioned and read from the operator's seat.
 - For relief valve (A), attach a 3000 psi (21 MPa) pressure gauge. Connect hose to draper pressure coupler (C) (male, orange colour code) on adapter.
 - For relief valve (B), attach a 5000 psi (34 MPa) pressure gauge. Remove pressure switch (D) and attach hose to this port.



PTO PUMP RELIEF VALVE

2. · Start engine and run at operating speed.
 - Engage header drive.
 - For relief valve (A), adjust draper speed control to minimum, so drapers are running slowly.
3. For relief valve (A), pressure should be 2150 to 2400 psi (14.8 to 16.5 MPa).
For relief valve (B), pressure should be 3850 to 4100 psi (26.5 to 28.2 MPa).

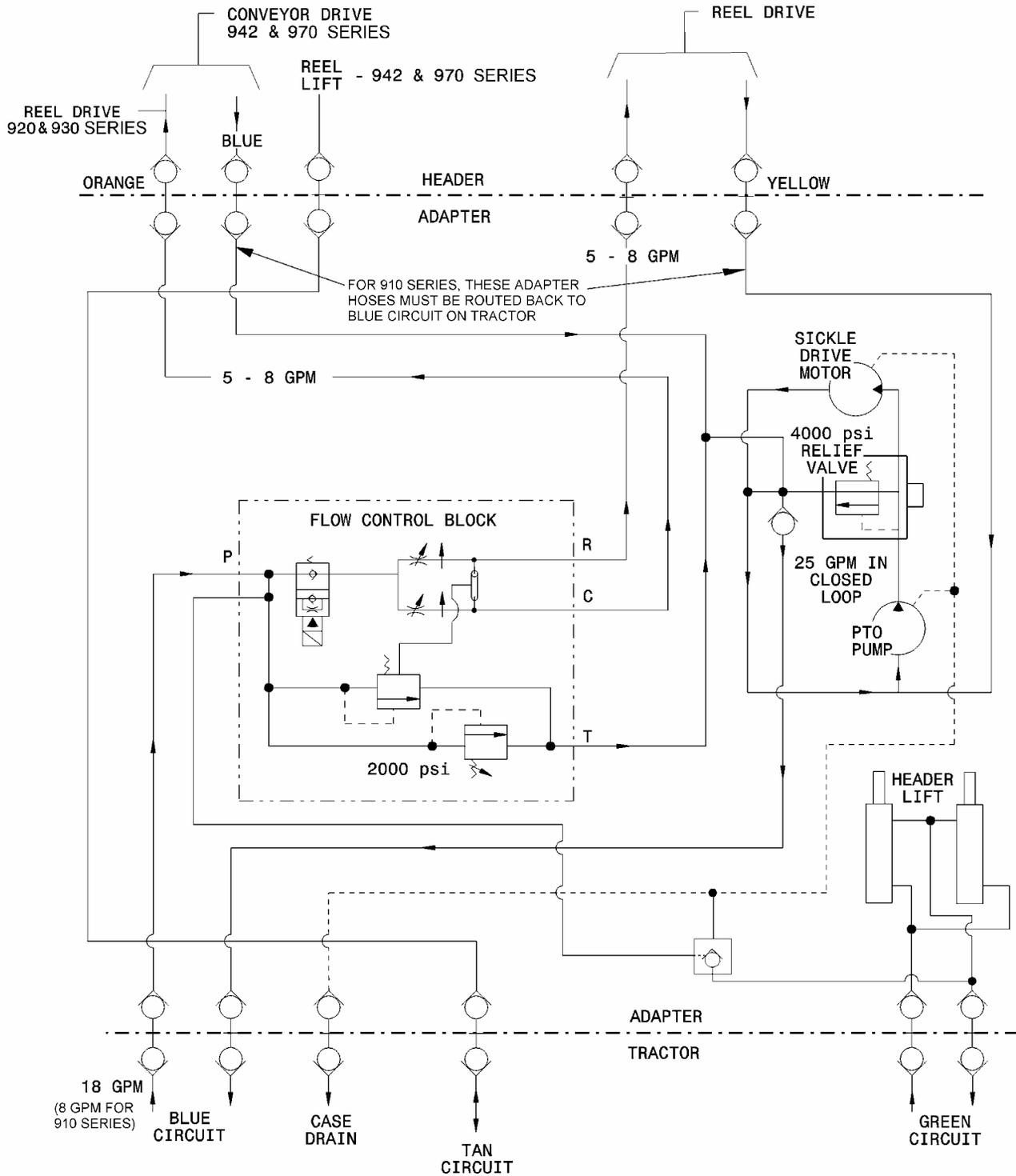
If pressures are not within spec, proceed with adjustment or replacement:

4. Disengage header drive. Shut off engine and remove key.
5. To adjust pressure setting:
 - Loosen jam nut at relief valve (A) or (B).
 - Turn the adjustment screw in 1/4 turn increments, clockwise to increase pressure, counter-clockwise to decrease.
6. Repeat checking and adjustment until pressure is correct, then tighten jam nut.

IMPORTANT: If relief pressure does not increase after adjusting the screw two or three times, check relief valve as follows: Remove relief valve from block. Check that no contaminant is preventing the spring-loaded poppet from properly seating against the valve body. Clean as required, and reinstall valve. Reset adjustment screw to original position before checking relief pressure.

MAINTENANCE/SERVICE

HYDRAULIC SYSTEM (continued)

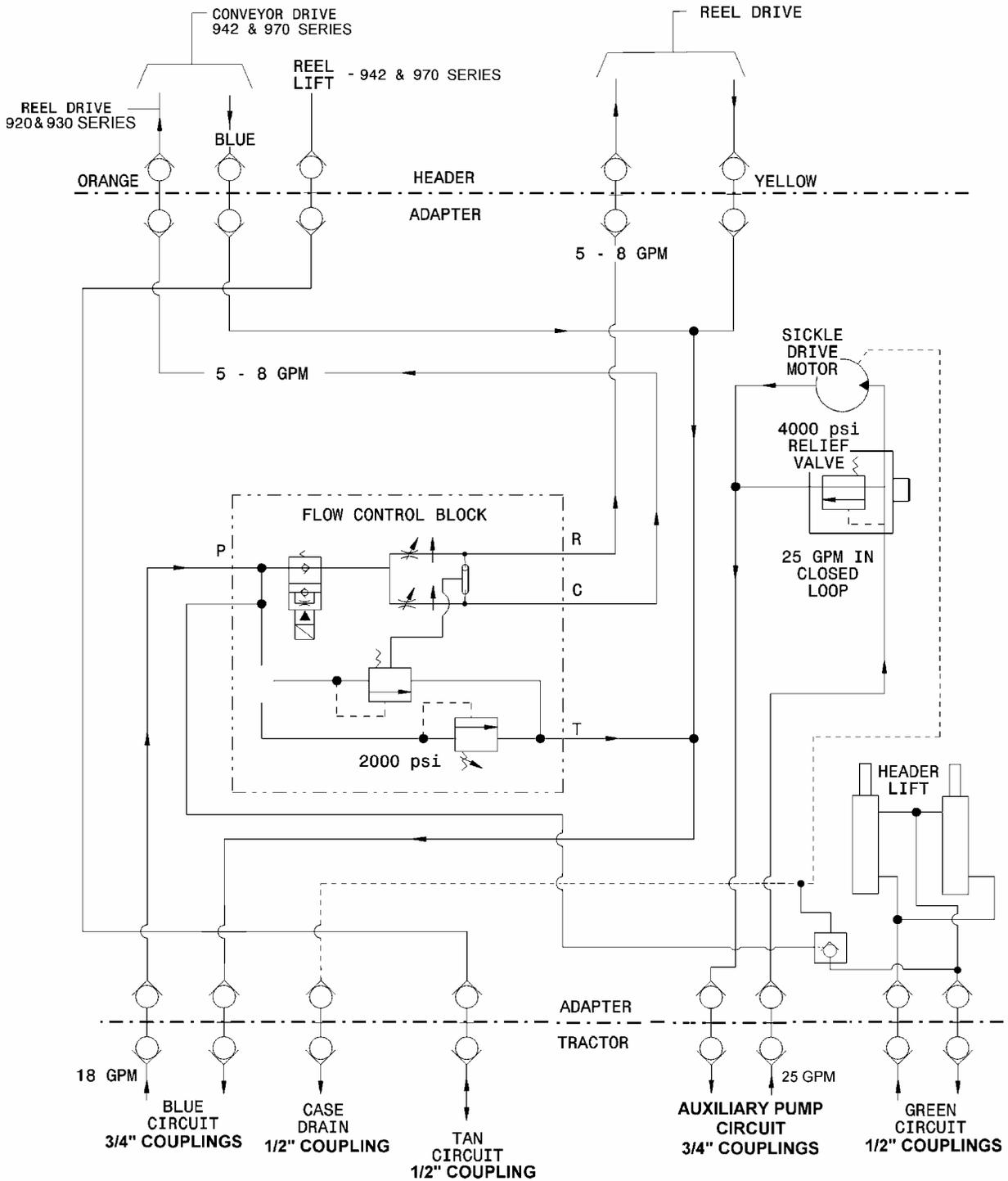


NOTE: Available flow from tractor for the above circuit is 22 GPM.

802 ADAPTER WITH MacDon HEADER DRIVE PUMP - HYDRAULIC SCHEMATIC

MAINTENANCE/SERVICE

HYDRAULIC SYSTEM (continued)

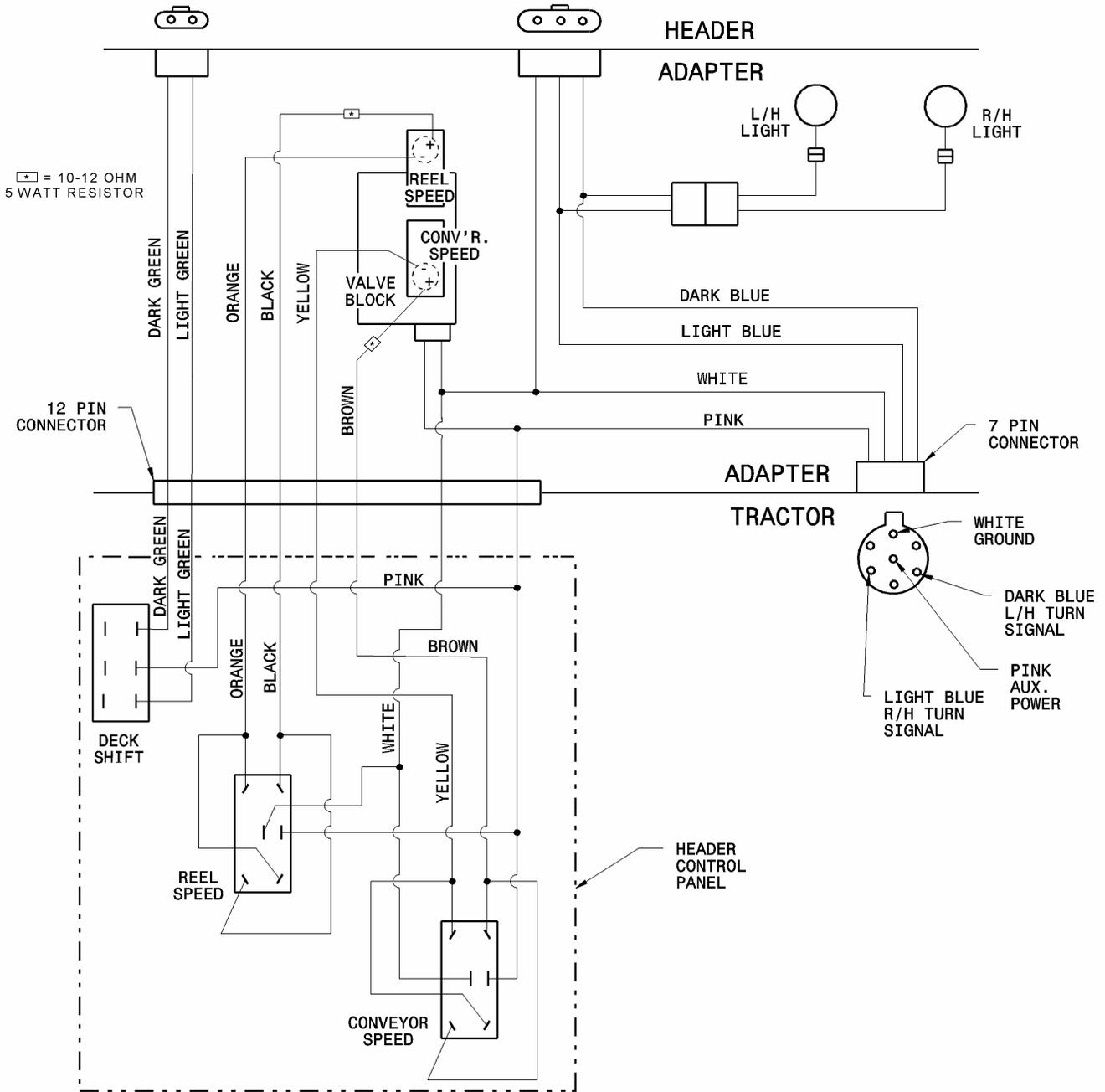


NOTE: Available flow from tractor for circuits other than auxillary circuit is 22 GPM.
 Available flow from tractor for Auxillary circuit is up to 33 GPM.

802 ADAPTER WITH NEW HOLLAND AUXILIARY DRIVE PUMP - HYDRAULIC SCHEMATIC

MAINTENANCE/SERVICE

ELECTRICAL SYSTEM



802 ADAPTER - ELECTRICAL SCHEMATIC

TROUBLESHOOTING

<u>SYMPTOM</u>	<u>PROBLEM</u>	<u>SOLUTION</u>	<u>REF.</u>
Reel does not operate smoothly.	Improper hydraulic flow.	Ensure that ¾" hoses to reel/draper flow valve are attached to BLUE hydraulic circuit with 18 GPM flow and open return to tank on tractor.	18
			6
Side drapers stall.	Improper hydraulic flow.	Ensure that ¾" hoses to reel/draper flow valve are attached to BLUE hydraulic circuit with 18 GPM flow and open return to tank on tractor.	18
			6
	Header improperly adjusted.	Adjust header as recommended.	*
Header or reel does not lift fast enough.	Relief pressure too low.	Increase relief pressure to 2500 psi.	37
	Raising header and/or reel while turning tractor.	To reduce lift time, do not lift header or reel while turning tractor.	-
	Flow to header drives set too high.	Set flow through BLUE hydraulic circuit to 18 GPM.	31
		Re-direct some flow from header drive to lift circuits: <ul style="list-style-type: none"> • Set reel and draper to desired speeds. • Decrease flow in BLUE circuit until reel and/or drapers start to slow. 	-
	Tractor is not supplying enough oil.	Check tractor hydraulics	*
Reel and/or drapers run too slow.	Raising header and/or reel while turning tractor.	To maintain reel and draper speeds, do not lift header or reel while turning tractor.	-
	Flow to lift circuits set too high.	Reduce oil flow to TAN and/or GREEN circuits.	*
	Flow to header drives set too low.	Set flow through BLUE hydraulic circuit to 18 GPM.	31
	Tractor is not supplying enough oil.	Check tractor hydraulics	*

* - See Tractor or Header Operator's Manual.

TROUBLESHOOTING

<u>SYMPTOM</u>	<u>PROBLEM</u>	<u>SOLUTION</u>	<u>REF.</u>
Sickle drive motor vibrates.	Improper hydraulic flow.	Reduce or increase oil flow/PTO rpm until vibration stops. Flow should be 25 gpm.	31
Float cannot be adjusted to heavy enough setting.	Light header.	Remove inner coil springs from float.	32
Tires running over crop.	Tractor wheels improperly set.	Adjust wheels.	*
		For TV140 Tractor: Install 4" wheel spacers (supplied by New Holland).	6
	Crop fanning out excessively.	Adjust header opening.	*
		Install windrow forming rods (970 Series Header only).	*

* - See Tractor or Header Operator's Manual.

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